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ABSTRACT

This evaluation of the Washington, D.C. Public Schools Career Education Project investigated student self concept, student relationships with the world of work, student attitudes toward career development, decision making skills, educator attitudes, and community involvement. The project was designed for inner city students in all grade levels. Some of the results indicated that: (1) Primary level career education students, 1974-75 school year, achieved higher scores on self acceptance and self security than did the previous year's primary school students. (2) Third grade students scored higher on social maturity, self acceptance and self security than did students in the same grade during the previous school year. (3) Intermediate level students in career education obtained higher scores than the 1973-1974 classes at the same grade levels in self acceptance, school affiliation and peer affiliation. (4) Junior High students performed well on the Self Observation Scales; student self concept generally increased with grade level. (5) Students were integrating career information into a logical base for decision making. (6) A high level of support for the program was demonstrated by the teachers, administrators, and community. The evaluators recommended that the program be expanded to serve the total population of the Washington, D.C. Public Schools. Statistical data are appended. (Author/HV)

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ANNUAL EVALUATION REPORT
FOR THE
EXEMPLARY PROJECT
IN CAREER DEVELOPMENT

1975

IBEX

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FOR THE
EXEMPLARY PROJECT
IN CAREER DEVELOPMENT
1975

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PREFACE

This annual evaluation report on The Career Development Exemplary Project is presented by IBEX, Incorporated to the Board of Education of the Schools of the District of Columbia under a contract pursuant to this evaluation effort. This is IBEX's third year as Evaluator for D.C.'s Career Education project.

Appreciation is extended to Ms. Bessie Etheridge, Ms. Martha Roache, Ms. Ellen Datcher, and Dr. J.S. Rao, for the hours of effort they spent to assure an exemplary evaluation. Career Education teachers went beyond the call of duty in their efforts toward this evaluation. IBEX expresses its sincere appreciation to all of them.

I. EXECUTIVE SUMMARY AND RECOMMENDATIONS

The U.S. Office of Education requires that all Part D Vocational Exemplary Projects have an independent third party evaluation. In response to a request for proposals from the Washington, D.C. Public Schools, IBEX, Incorporated submitted a proposal and was selected to perform the evaluation.

The evaluation activities began in March, 1975 with a design conference at Browne Junior High School. This conference set the parameters for the evaluation and specified the roles to be played by IBEX and the Project staff in carrying out the evaluation functions.

The IBEX evaluation team was headed by Dr. Hugh I. Pack and included Helmut Feifs, President of IBEX, Mr. Morris Johnson, Mr. M. Riggs and Mr. Stephen Schulz of the IBEX staff.

The results of the evaluation are organized around six information domains or evaluation areas of interest. These domains are: (1) student self concept, (2) student relationships with the world of work, (3) student attitudes toward career development, (4) decisionmaking skills, (5) educator attitudes and (6) community involvement.

The major results of this evaluation are summarized in the following paragraphs. A detailed presentation of the results of IBEX's evaluation is found in Section IV.

Results of the evaluation show:

- Washington, D.C. primary level (grades 1, 2 and 3) career education students, 1974-75 school year, achieved higher scores on Self Acceptance and Self Security than did the previous year's students at the same grade levels.
- Third grade students scored higher on Social Maturity, Self Acceptance and Self Security than did students in the same grade during the previous school year.
- Intermediate level students (grades 4, 5, and 6) in career education obtained higher scores than the 1973-74 classes at the same grade levels in Self Acceptance, School Affiliation and Peer Affiliation.
- Junior high students (grades 7, 8, and 9) performed well on the Junior High Level of the Self Observation Scales. Student self concept increased, generally, with grade level. This particular student instrument was not available for the 1973-74 evaluation, so no pre-post comparison can be made.
- Evidence exists to indicate that students are integrating program information concerning the world of work and career development into a good logical base upon which to structure career decisions.

- Evidence exists which indicates that the decision making proclivities of career education students, junior and senior high, are good, but could use some concerted effort in a few areas.
- Evidence exists to indicate that the Washington, D.C. career education teacher and classroom are utilizing their talents and resources to the optimum to exact maximum student performance.
- Evidence exists to show that the D.C. career education project has maximum teacher support both philosophically and in action.
- Evidence exists to indicate an extremely high level of administrator support for active career education.
- Subjective evidence exists to indicate a high level of community support for career education and for the project.

Based on the results of this year's evaluation, the evaluation team offers the following recommendations:

- Specific activities should be undertaken toward improving the self concept of those students scoring in the lowest quartile on the Self Observation Scales.
- Evidence exists that specific program activities are having salubrious effects on student self concept and those activities should continue.

- Student contacts with the world of work, field trips, day visits, resource speakers, should be expanded. Evidence exists which indicates that students are receiving, integrating and utilizing the career information which they receive as a result of these exposures.
- The stated desires of teachers, principals and support staff for an increase in joint planning should be reviewed for program congruency, feasibility and possible implementation. It should be pointed out, however, that given current career education staff levels, variable inter and intra school time schedules, and an increase in the number of schools served, would make any increase a challenge.
- The evaluation data relating to the decision making process should be studied carefully and used to orient future program activities.
- Some thought should be given, by the career education staff, to documenting and publicizing the present methods used to engender such an excellent degree of support from teachers and administrators for the career education concept and program.
- Some thought should be given by the staff and the Evaluator to find a non-obtrusive method of measuring community involvement.

The final recommendation that we as evaluators have, concerns the continuation and expansion of the program. Based on our experience as past and present evaluators of the Washington, D.C. Public Schools Career Education Project and other career education projects in the nation, we recommend that the project be expanded to serve the total population of the D.C. public schools. This recommendation is based on a review of the positive increases in student knowledge of self, the world of work and the student's role in that continuum. Based on our contacts with administrators, teachers, parents and students, the clear consensus was that career education provided the necessary integrating element which put into a reality context a student's school work, his aspirations and the challenges that await him in the world of work.

The cost of providing this vital program to students has continued to decrease as the number of students has increased. There has been no deterioration of program quality (as the number of students served increased), quite to the contrary, it has, in its totality, increased. As Career Education in the Inner City moves toward the end of its federal funding, serious consideration should be given now, at the highest levels, to making the project a locally supported program.

II. PROGRAM DESCRIPTION

This is the second year of a projected three-year program for the Career Education in the Inner City (CEIC) project for Washington, D.C. Public Schools. The project is a major part of the public schools' drive to make career education and career development a relevant and acceptable part of the Washington, D.C. school system. Washington looks with pride to the development and continued growth of its public school system. The District recognizes, however, a major problem in placing career development and career education in proper and significant perspective. The schools have never adequately served the vocational and educational needs of all children. Black students, and an increasing number of dissatisfied students and parents, are demanding that our priorities for student progress be examined more closely. Earlier attempts to improve instruction through career education summarized the need for career development this way:

Critics of the public schools abound, but few are more devastating than the sociologist Paul Goodman, who charges in Compulsory Miseducation and the Community of Scholars: "spirit breaking is the principal function of the typical lower class school . . . we are getting lockstep scheduling and grading to the point of torture . . . The scholastically bright are not following their aspirations, but are being pressured and bribed; the majority --- those who are bright but have other kinds of vitality, are being subdued". In an era when the successful completion of high school is viewed as essential for

employment, well over one-third of the students in the schools of the District of Columbia drop out before high school graduation. An even larger number are failing to respond enthusiastically or benefit significantly from the educational programs in which they continue to be enrolled.

Technological advancements in transportation, communications and in the methods of production are having an impact on all aspects of our society. Every indication is that the rate of social change will accelerate rather than abate in the years to come. And yet, the structure of our curriculum and the patterns of our schooling still follow designs initiated thirty to fifty years ago.

In response to its charge to educate individual children, the schools continue to look with pride upon the process of upward social and economic mobility which they have supported in the past. Today, however, the weeding-out process which facilitated this process is no longer acceptable. The system of testing and ability grouping which enabled the focusing of resources on those whom the schools identified as talented has been rejected publicly and in the courts. Nor is it any longer possible for the schools to "push out" their rejects into a job market ready and willing to

employ massive numbers of the unskilled. The present and future plight of the anachronistic dropout is one of the gravest indictments leveled by critics against our schools.

Preparation for the world of work would seem to be an inevitable and primary objective of the public schools; it serves both a societal need and a need of individuals. Such has not been the case. The schools have never been judged on their contribution to successful work careers, but rather, on their success in getting their graduates into college. And judged on this criteria, the public schools have been successful. More than 63% of the graduates from neighborhood high schools in the District of Columbia last year went on to college or other forms of continuing education. What is ignored in this type of evaluation is that almost half of our students are not graduating from high school. Pressed now to provide high school education for all students, the schools must reassess their traditional orientation towards the college-bound.

Specific vocational programs at the high school level have suffered a second class status. Although the overwhelming majority of the graduates from vocational courses are trained with specific marketable skills, many feel that they must compromise their self respect to gain the skill.

In the words of the social psychologist, Edgar Friedenberg, " . . . no matter how good you are in shop, there is plenty in most high schools to remind you that if you're in the vocational track, you're already dead". The second class status is emphasized when vocational students are segregated into special high schools. Furthermore, those students who do choose to enter vocational schools, and who pass the entrance examinations designed to prevent the schools from becoming dumping grounds for the general or academic high schools, must select a specific career at the age of fifteen, long before they have had an opportunity to explore the broad range of career opportunities which our economy has to offer today, or to consider the future implications of these careers. Specialists in occupational training have become increasingly critical of the narrow vocational program offered at the secondary level. While they do not question the need to prepare students with marketable skills, they advocate more emphasis upon general skills which will prepare the individuals for the occupational adjustments to technological changes which will be required with increasing frequency in the years ahead.

It is the purpose of this project evaluation to determine if 1) the programs have addressed themselves

to the preceding problems, 2) the implementation of these projects has relieved in any significant way the severity of the stated problems, 3) the operation of the project has made a significant impact on the students and teachers they have touched.

IBEX, Inc. functioned as third party evaluator for the final year of the Career Development Exemplary Project which was the forerunner of CEIC in the District. Such a role provides a unique background for IBEX as the contract agency for evaluating the new three-year career education projects.

In summary, it is IBEX's understanding that the following general needs are to be addressed through this evaluation activity:

1. The need to determine the relative effectiveness of the Career Education in the Inner City Project in meeting its objectives.
2. The need to increase knowledge about the effects of a career development curriculum that begins in early childhood.
3. The need to increase knowledge about what can be done by the school, the home and the total community to affect the career education of children and youth.

4. The need to trace the impact of early career education programs on subsequent school and vocational life.
5. The need to identify program strengths and program weaknesses in order that continuous improvement can be sustained.
6. To determine effective ways of introducing teachers to career education.
7. To determine and implement ways to encourage teachers to infuse career education concepts throughout the entire curriculum.

III. EVALUATION DESIGN

The following information requirements for the evaluation of career education in the District of Columbia Schools are the result of an evaluation design conference held at Browne Junior High School with participants from IBEX, Inc. and from the project staff.

Information Users

The following is a listing of information users as agreed upon at the design conference:

- Project Director
- Project Staff
- D.C. Career Development Administration
- U. S. Office of Education
- Community
- Board of Education
- Local School Staffs
- Superintendent
- Associate Superintendent
- Regional Superintendents

This list in no way refers to any rank order of line and staff relationships, rather, the enumeration is based on the need for information about CEIC. Information is for those who make operational and policy decisions about the project.

Information Domains

The following is a priority list of information domains for the CEIC evaluation. These domains are listed according to priorities set at the evaluation design conference mentioned earlier.

1. Student Outcomes

- a. economic awareness
- b. non-cognitive growth

2. Faculty(s) Involvement

- a. teacher and staff - counselor, librarians, etc. attitudes
- b. teacher practices
- c. materials utilization
- d. commitment
- e. leadership
- f. use of community resources
- g. inservice and staff development

3. Administrative Considerations

- a. cost and budget analysis
- b. model generalizability

Evaluation Constraints

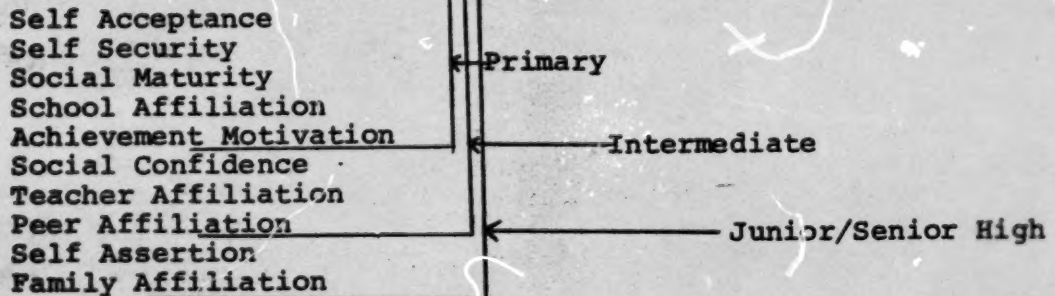
The following constraints are agreed upon as a part of the evaluation design:

- (a) a fixed price budget of \$12,096.00
- (b) a career education student population of 200 students at each concerned grade level. Test to be administered using a matrix sampling approach at each grade level.
- (c) no student should take more than one 30-minute scale.
- (d) teachers will complete one thirty-minute survey.
- (e) a random sample of 80 teachers will be observed.

Evaluation Questions

Student Outcomes

- 1) Do Career Education students, by grade level, show more economic awareness than similar non-Career Education students in the following areas?:
 - (a) occupation awareness
 - (b) relationship of jobs to society
 - (c) dignity of work
- 2) Do Career Education students, at each grade level, show more positive affective behavior than similar non-Career Education students in the following areas?:



Faculty Involvement

- 3) Do faculties involved in Career Education show positive attitudes toward its concepts and practices?
- 4) What is the level of commitment of involved faculties? What is the evidence?
- 5) What are the components of the inservice education program? Do the teachers view it as effective?

Administration Considerations

- 6) What are the start-up and continuing costs of a Career Education project?
- 7) What elements of the present model can be generalized?

IV. DATA BASE ELEMENTS

Utilizing the evaluation questions of interest as basic information, necessary data elements are identified in order to respond to the questions. A data element is some type or piece of information that is to be used in responding to a question. In order to present the following data files, each question was "mapped" or analyzed to determine which data elements were needed. Three files have been identified; the Student File which identified the data elements necessary on each student in the study, the Staff File which identifies the data necessary on each teacher or other staff in the study and the Process File which identifies the remaining necessary data elements.

These data files act as master control for obtaining and reducing the volume of data that is necessary to complete the overall evaluation. Upon completion and approval of the data file, data formats are designed to indicate the process and procedure necessary to collect and record the data called for. The data formats were presented in the Instrument Catalog in early May, 1975.

Student Data File

<u>Number</u>	<u>Data Element Entry</u>
1	School
2	Grade
3	Sex
4	Self Observation Scales
	Primary
	Intermediate
	Junior & Senior High
	Occupation Awareness Survey
	Primary
	Intermediate
6	Career Awareness Development
	Inventory
7	Career Maturity Inventory
8	Decision Making Scale

Process File

<u>Number</u>	<u>Data Element Entry</u>
1	Proposed Budget by Components
2	Expended Budget by Components
3	Annual Budget
4	Records of Inservice Meetings
5	Inservice Education Reports

Staff Data File

<u>Number</u>	<u>Data Element Entry</u>
1	Name
2	Social Security Number
3	School
4	Grade
5	Career Education Teacher
	Practices
6	Career Education Classroom
	Observation Scale
7	Principal's Interview Guide

V. INSTRUMENTATION

In IBE, an evaluation instrument is any procedure by which information is gathered and recorded. An evaluation instrument may be concerned with measurement or only with data collection. Some instruments are commercially available and others will be developed by the evaluation team and the CEIC staff. This is especially true for instrumentation that is basically concerned with CEIC as an entity as opposed to career development generally. The following list presents the instruments that IBEX recommends for use in this evaluation. A brief description is presented for each instrument. The numbers presented parenthetically refer to the evaluation questions of interest for which the instrument was chosen.

Instrument Summary

1. SELF OBSERVATION SCALES (Primary, Intermediate and Junior & Senior High) (SOS) -

A measure of student self concept at the primary (K-3) and intermediate (4-6); junior high (7-9) and senior high (10-12) levels. Subscales include: Self Acceptance, School Affiliation, Social Maturity, Self Security and Achievement Motivation. The intermediate level adds Teacher Affiliation, Social Confidence and Peer Affiliation, while the junior and senior high level adds a Self Assertion subscale.

2. OCCUPATION AWARENESS SURVEY (Primary & Intermediate) (OAS) -

An instrument designed by IBEX and used to determine if the student is aware of career possibilities and if he sees dignity in all work. Score on items and item distribution rather than on students or class.

3. CAREER AWARENESS INVENTORY (Elementary and Secondary) (CADI) -

An instrument developed by IBEX to determine if students can relate social and academic skills learned in school to occupational requirements. Subscales include: social skills, academic skills and aspiration.

4. DECISION MAKING SCALE (DMS) - An instrument developed by IBEX to assess the decision making skills of secondary school students.

5. CAREER EDUCATION TEACHER PRACTICES SURVEY (CETPS) -
A teacher-completed scale to determine level of use by teacher of certain suggested career education practices.

6. CLASSROOM OBSERVATION SCALE - An IBEX-developed instrument to be used by a trained observer to evaluate the classroom environment.

VI. POPULATION SELECTION PROCEDURES

The total participants includes the following -- students, teachers and principals. The evaluation design required the use of career education groups at specified grade levels. The goal of the evaluation was to identify between 100 to 250 children (5 to 10 classes) at a grade level. After class groups were identified, a matrix sampling approach was used to determine the instruments to be given to each class at each grade level from among the total group of instruments presented. (see Appendix A).

The evaluation results are presented in the pre-post mode where possible. The pre data was derived from the 1973-74 experimental group results. No control group was used in the 1974-75 evaluation.

The response rate by teachers and students was good but, due to schedule problems, some classrooms within schools and some schools chosen for participation were not able to participate. This accounts for the small sample size at some grade levels.

VII. EVALUATION RESULTS

This section is organized around six major information evaluation areas of interest. These domains are: (1) student self concept, (2) student relationship with the world of work, (3) student attitudes toward career development, (4) student decision making skill, (5) educator attitudes and (6) community involvement.

Student Self Concept

A first objective of CEIC at the elementary level is "to enable students to develop a more positive self concept and greater understanding of self". The following explanation is presented as background to understanding the results presented later in this document.

Between the ages of five and twelve, the self concept begins to crystalize. During this period (termed the latency period by many authors), the child matures considerably in the physical, cognitive and affective areas. He confronts his environment with an increasingly stable set of feelings, attitudes and behaviors which are based, to a large extent, on his self concept which is, likewise, stabilizing. As the child becomes older he becomes more sure of what he likes and dislikes, who he likes and dislikes, what he enjoys doing and what he dislikes doing, how he sees his future and what he will be doing in this future. He begins to plan and his aspirations and hopes tend to be consistent with the way he values himself, which, in turn, is dictated in large part by how he perceives others value him.

Although the early school years are characterized by a crystalization of self, the child also begins to differentiate. The self concept of the five-year-old is a relatively simple construct. The five-year-old views most things as a dichotomy: people are good or bad, food is good or bad, places are happy or sad places to be, other children are friendly or mean. As the six-year-old enters first grade, new demands are placed on him. He is expected to interact with unfamiliar children and authority figures and, to a great extent, his well being is determined by how successfully he negotiates these new demands. It is these early school years that have a truly profound impact on the child's self concept development. Never before has he been consistently, objectively and sometimes coldly, judged by peers and adults. He is unable to separate himself from his actions so that reprimands and criticism often become viewed as direct threats to self. With this background information we now turn to the correlates of a positive and negative self concept, respectively.

The Positive Self Concept*

Children with positive self concepts are, first of all, confident about their ability to meet everyday problems and demands. They are confident about their relationships with other people and take pleasure in mutual interdependence, in needing others and in being needed. Autonomy and interdependence

* The profiles for a "positive" and "negative" self concept are drawn from the results of the national validation and norming of the Self Observation Scales.

are beginning to take shape. Children with strong self concepts view themselves as desirable and valuable contributors to the well being of those around them. They see themselves as deserving of attention and love and feel they are capable of reciprocating. They compare themselves favorably with their peers and feel that authority figures are supportive and interested in them as individuals. These children tend to be comparatively independent and reliable. These qualities may stem from their feelings of sufficiency and adequacy in new and challenging situations. They are relatively free from anxiety, nervousness, excessive worry, tiredness and loneliness. They report being happy with the way they look and would not change their appearance if they could.

Children with a positive view of themselves enjoy interacting with their peers and see themselves as on a par with their peers in most situations, while occasionally professing superiority in certain areas. They recognize the social consequences of certain "asocial" actions and see the benefits of give-and-take in social interactions. These children are able to admit that they make mistakes and that they sometimes hurt other people, but they apparently do not view these admissions as major threats to self.

Behaviorally, these children are seldom designated as problem children. They usually appear comparatively calm, keep their hands to themselves and, although they are frequently

competitive, they express aggression when external considerations warrant aggressive behavior. They express dissatisfaction with their own poor performances but relatively seldom make self deprecating remarks. They react positively to constructive criticism, can accept praise well, and derive obvious pleasure from a job well done.

Scholastically, children with positive self concepts tend to be above expectation in reading and mathematics. They tend to attain higher scores on standardized achievement tests than would be predicted from ability tests. These children are positive toward school and view it as a happy, worthwhile place to be.

The Negative Self Concept

Children with poor self concepts are insecure and pessimistic about their ability to meet everyday problems and demands and they are unsure about their relationships with others. They often tend to be either overly dependent and withdrawn or overly aggressive with apparently minimal overt needs for social interaction and, in each case, growth toward autonomy appears stunted and retarded. These children view themselves as undesirable and, through their often inappropriate behavior (which is, although inappropriate, usually quite consistent with the way the children feel about themselves), they are regularly reinforced

in these feelings.* They report not being needed by significant others and do not feel that others care about them as individuals. They compare themselves unfavorably with their peers and frequently report being inferior to their peers in age-appropriate activities. Authority figures represent a threat to children with poor self concepts.

These children are threatened in social interactions and prefer to play with younger children. They report a desire to dominate in peer-oriented activities, i.e., always wanting to be first or always wanting to be the leader, and yet, would prefer to play alone if given a choice. They tend to be quitters and are satisfied with poor performance (again, poor performance is consistent with the way these children view themselves). These children find it difficult to admit to even common mistakes and are quite insensitive to other people's feelings.

Behaviorally, these children are frequently labeled as problem children. The acting out, aggressive, verbally disruptive child has a markedly lower self concept than does the "healthy" child. Likewise, the insecure, withdrawn, quiet child also has a low self concept, but his inadequacies are manifested differently from the aggressive child. These children respond negatively to criticism and, surprisingly, they often respond

*Modifying the truism from the financial world that "the rich get richer and the poor get poorer", we can say that children with strong self concepts get positive reinforcement and, thus get stronger, while those with weak self concepts get negatively reinforced and thus, get weaker.

inappropriately or even negatively to praise because positive feelings are inconsistent with the way these children feel about themselves.

Scholastically, children with poor self concepts tend to be below average in reading and mathematics. They tend to obtain lower scores on standardized achievement tests than would be predicted from ability tests. These children are negative toward school and view it as an unhappy place to be.

As a measure of children's self concepts, the Self Observation Scales (SOS) were used in this evaluation. The SOS is a direct, self report, group administered instrument comprised of fifty items at the primary level (K-3) and sixty items at the intermediate level (4-6).

The Primary level of the SOS measures five dimensions of children's self concept. Each scale is labeled in a positive manner with high scores being most characteristic of the scale name.

The scales are as follows:

Self Acceptance

Children with high scores view themselves positively and attribute to themselves qualities of happiness, importance, and general competence. They see themselves as being valued by peers, family and teachers. Children with low scores see themselves as unhappy, lacking in general competence and of little importance to others.

Social Maturity

Children with high scores on this scale know how they are supposed to think and feel in a variety of social situations. They have learned the importance of such notions as "fair play", "sharing", "perseverance", "helpfulness", and "generosity". Children with low scores on this scale have not learned these notions and are likely to evidence behaviors that most adults would characterize as selfish, inconsiderate or immature.

School Affiliation

Children with high scores view school as a positive influence in their lives. They enjoy going to school, and they enjoy the activities associated with school. Children with low scores view school as an unhappy place to be. They do not enjoy most school related activities and are negative about the importance of school in their lives.

Self Security

Children with high scores report a high level of emotional confidence or stability. They feel that they are in reasonable control of the factors that affect their lives and spend little time worrying over possible troubles. Children with low scores on this scale worry a great deal. They are concerned that something bad may happen and report feelings of nervousness.

Achievement Motivation

This is a special scale, relating achievement and ability to self concept. High scores indicate increased probability that the child will achieve well relative to ability; low scores indicate increased probability that the child will not achieve as well as might be expected on the basis of his ability. This scale is considered to be experimental, and we recommend that its use for individual assessment be deferred pending the results of our current program of confirmatory analyses.

The Intermediate level of the SOS measures the same five dimensions of children's self concept and adds three additional scales, as follows:

Self Security

Children with high scores report a high level of emotional confidence or stability. They feel that they are in reasonable control of the factors that affect their lives and spend little time worrying over possible troubles. Children with low scores on this scale worry a great deal. They are concerned that something bad may happen and report feelings of nervousness.

Teacher Affiliation

Children with high scores on this scale like their teachers. They see the teacher as helpful, attentive, understanding and generous. Children with low scores on this scale see the teacher as arbitrary, inconsiderate of children, and/or a source of emotional pain.

Peer Affiliation

Children with high scores on this scale consider their relationships with other children to be both of high quality and of considerable importance to them. They see themselves as approved of and valued by their peers. They like to be with other children. Children with low scores do not see their peer relationships as an asset. They see other children as unfriendly, they have few friends, and do not accept the responsibilities of friendship easily.

The Junior and Senior High levels of the SOS were also used in this evaluation. The scale descriptions of these instruments follow.

The Junior High level of the Self Observation Scales is designed for use at grades 7-9. Form A measures nine dimensions of students' affective behavior, while Form B measures the same dimensions, less the Family Affiliation Scale. Each scale is labeled in a positive manner with high scores being most characteristic of the label.

SCALE I - SELF ASSERTION

Students with high scores view themselves as possessing leadership qualities and as being respected by others for these qualities. The emphasis on this scale is on how students believe others view them. Students with low scores see themselves as lacking leadership ability and assertiveness. Three items highly related to this scale are: Other students look to me for leadership; Other students look to me for ideas; In discussions with my friends, my point of view usually wins.

SCALE II - SELF ACCEPTANCE

Students with high scores view themselves positively and attribute to themselves qualities of basic competence, self satisfaction and happiness. They see themselves as being good at a lot of activities and as being confident about their future success. Students with low scores are unsatisfied with their performance and capabilities and are unsure of their futures. Three items highly related to this scale are: I do a lot of things well; I think I will be successful in life; When I look in the mirror, I like what I see.

SCALE III - SELF SECURITY

Students with high scores report a high level of emotional confidence or stability. They report being in control of factors affecting their lives and worry very little about either specific or non-specific fears. Students with low scores on this scale worry a great deal. They report nervousness about non-specific performance expectations and often feel that they worry more now than in the past. Three items highly related to this scale are: I often find myself worrying about something; At times I lose sleep over worry; I worry about losing my friends.

SCALE IV - SOCIAL MATURITY

Students with high scores on this scale know how they are supposed to think and feel in a variety of social situations. They are comfortable around younger children and show empathy in their social relations. They believe in saying what they feel and understand the importance of listening to others. Students with low scores on this scale are socially self centered, lack responsiveness to other people's feelings and are reticent to express their own feelings. Three items highly related to this scale are: When I feel like it, I cry; Younger kids usually bore me; Most of the time I feel sorry for someone who is hurt.

SCALE V - SOCIAL CONFIDENCE

Students with high scores on this scale feel confident of their ability to relate in social situations. They feel confident about their ability to make and keep friends and believe that other people value their friendship. Students with low scores have difficulty making friends and lack confidence in social situations. Three items highly related to this scale are: People who are like me don't have a good chance to be successful; Most of my friends don't care what I think; If people knew what I am really like, they would steer clear of me.

SCALE VI - SCHOOL AFFILIATION

Students with high scores view school positively, enjoy going to school and enjoy the activities associated with school. Students scoring low on this scale see school as a "hassle" that keeps them from doing what they want to do. Three items highly related to this scale are: I like to stay home from school; This school is like a jail; School frequently keeps me from doing what I want to do.

SCALE VII - TEACHER AFFILIATION

Students with high scores on this scale like their teachers. They see the teacher as helpful, attentive, understanding and generous. Students with low scores see the teacher as arbitrary, inconsiderate of children and/or as a source of emotional pain. Three items highly related to this scale are: My teachers like to help me; When I do something wrong, my teachers correct me without hurting my feelings; My teachers expect too much of me.

SCALE VIII - PEER AFFILIATION

Students with high scores on this scale consider their relationships with other students to be both of high quality and of considerable importance to them. They see themselves as approved of and valued by their peers. They like to be with other students. Students with low scores do not see their peer relationships as an asset. They see other students as unfriendly, they have few friends, and do not accept the responsibilities of friendship easily. Three items highly related to this scale are: I make friends easily; Other students are usually fair to me; I can count on my friends when I am in trouble.

SCALE IX - FAMILY AFFILIATION

Students with high scores on this scale report a positive relationship with their parents and family. They see their parents as helping in time of need and as being understanding. Students with low scores don't see home as a place to go when troubles begin. They do not feel trusted by their family and, likewise, do not feel that they treat their family as well as they should. Three items highly related to this scale are: My parents usually understand my problems; My parents do all they can for me; I treat my parents as well as I should.

The Senior Level of the Self Observation Scales is designed for use at grades 10-12, and measures the same nine dimensions of students' affective behavior as does the Junior Level.

Scoring of the SOS is based on national norms. For each scale, a child receives a standard score (T score), representing a distribution with a mean of 50 and a standard deviation of 10. National percentile and stanine equivalents of this standard score also are provided. Responses to individual items are not given.

The Primary, Intermediate, and Junior and Senior high Levels of the SOS were given to the student sample at grades K-12 in the Spring of 1974. Tables 1 through 4 present the results of the Primary SOS.

Based on standard scores having a mean of 50 and a standard deviation of 10, these results indicate that:

- D.C. primary career education students, 1974-75 school year, achieve higher scores in Self Acceptance than do the previous year students at the same grade level.
- D.C. primary career education students, 1974-75 school year, achieve higher scores in Self Security than the previous year students at the same grade level.
- At the third grade level students in the 1974-75 sample scored higher on Social Maturity, Self Acceptance and Self Security than did students in the third grade from the previous year sample.

The results of the SOS Intermediate level are presented in tables 5 through 8. An examination of these tables indicates that:

- Intermediate students in Career Education classes (1974-75) obtain higher scores than the 1973-74 classes in Self Acceptance, School Affiliation, and Peer Affiliation (Table 5).
- Intermediate students in the 1973-74 cohort scored higher in Social Maturity, Self Security, Social Confidence, and Teacher Affiliation.
- Achievement Motivation for both year cohorts remains essentially the same, with the 1974-75 cohort being somewhat more homogeneous.

The results of the Junior High level of the SOS are presented in Tables 9 and 10. An examination of these results indicates:

- Ninth graders scored higher than the seventh and eighth graders on Self Assertion. Self Acceptance, Self Security, Social Maturity, Family Affiliation, Peer Affiliation and School Affiliation.
- Eighth graders scored higher than grades 7 and 9 on Social Confidence and lower on Family Affiliation, Teacher Affiliation and School Affiliation.

- As a general trend, ninth graders scored higher than did seventh or eighth graders and one reason, it seems safe to assume, is that they have been in the program longer.

The results of the tenth, eleventh, and twelfth grade Self Observation Scales are not included in this report, as the number of students who took this instrument was quite small. Any conclusions drawn from such data would be invalid. The results will be presented to the Program Director.

Student Relationships with the World of Work

One of the evaluation questions asks "How do Project and control students perceive the world of work and their relationship to it?" One instrument was used to assess this area this year - the Occupation Awareness Survey (OAS).

As an aid to the interpretation of the results of the OAS, which are presented in Tables 11 through 18, the jobs listed on each level of the instrument were broken down into arbitrary categories. The category specific JAQ's were summed up and an average JAQ for each category was determined. The summed JAQ's were then compared pre and post, and gain scores were computed for each category. A T-test was conducted to see if there were any significant differences in the scores by grade level, by category and by gain scores. No significant differences were found. This, however, does not negate the value of the data obtained.

The criteria used to place specific jobs in a category, while somewhat arbitrary, consisted of the following parameters:

1. Educational requirements
2. Level of responsibility
3. Level of personal initiative
 required for job
4. Status and derived pay.

Every job was evaluated on the basis of the criteria and placed in a category on the basis of a weighted score. While this method of data presentation does have some methodological shortcomings, it does have some useful aspects. It allows us to see trend lines in a large number of student scores.

It should be remembered that the purpose of the CEIC project is not to have young children make job choices for their future, rather, it is to make all students aware of more occupations.

The results of the categorization of the OAS is in Tables 11 through 14. The individual JAQ's are presented in Tables 15 through 18 in Appendix A.

The results of the OAS for grades 2, 3, 4, and 5, (Tables 11 through 18) indicate several things. The primary indication is that students at these grade levels are not rejecting any career possibility. This must be considered a success for both the home and school of the career education student. The student has not closed his mind to any possible career. It must also be assumed that he will, therefore, be receptive to the next stage in his career development - career survey.

The second thing suggested by the results of the OAS is that students are influenced by the efforts of the career education program in their behalf. It can be seen from the individual grade JAQs, Tables 15 through 18, that students react to information they obtain as a result of exposure to these careers through the career development process. It is interesting to note, as an example, that when students visit the national parks, their JAQs for Park Ranger and Game Warden go up. This would seem to be a sure indication that program activities in the world of work are having a highly positive effect.

For the Primary Grade Level (Grades 2 and 3) OAS
the jobs by category were:

(1) Unskilled

Factory Worker
Farm Worker
House Cleaner
School Custodian
Usher
Cook/McDonald's

(3) Technical

Police Cadet
Radio Announcer
Auto Mechanic
Truck Driver

(2) Trade

Supermarket Cashier
Secretary
Airline Ticket Sales
Taxi Driver
House-to-House Salesman
Sales Clerk

(4) Semi Professional

Writer/Motor Trend
Teacher
Actor/Actress

(5) Professional

Hotel Manager
Airlines Pilot
Doctor

For the Elementary Grade Level (Grades 4 and 5) OAS
the jobs by category were:

(1) Unskilled

Sanitation Worker
Factory Worker
Farm Worker
House Cleaner
School Custodian
Usher
Cook/McDonald's

(3) Technical

Game Warden
Police Cadet
Dental Assistant
Law Aide
Medical Assistant
Photographer
Radio Announcer
Auto Mechanic
Truck Driver

(4) Semi Professional

Fashion Designer
Writer/Motor Trend
Manager (Travel Agency)
Teacher
Actor/Actress

(2) Trade

Supermarket Cashier
Switchboard Operator
Secretary
Bookkeeper
Airline Ticket Sales
Park Guide
Florist
Child Care
Stock Clerk
Taxi Driver
Brick Mason
Plumber
Printer
House-to-House Salesman
Insurance Clerk
Sales Clerk

(5) Professional

Hotel Manager
Minister
Editor
Airline Pilot
Doctor

The Decision Making Scale

The Decision Making Scale used in the Spring of 1975 represents the fourth revision in the development of the DMS. Since there was a major revision after the 1973-74 administration, pre-post scores are not available. This revision of the DMS has six subscales.

The following is a description of the scales of the DMS.

SCALE 1 - DECISION INTEGRITY

Students with high scores view themselves positively and have a great deal of confidence in their ability to make sound decisions. Students with low scores perceive, with some uncertainty, the soundness of their decisions. The emphasis on this scale is on how students believe others view the student's decisions and the outcome of the student's decisions. Three items highly related to this scale are: Do you worry a good deal about the effects of your reactions on others?; Do you worry a good deal about what others think of you?; Do you worry a lot about your mistakes?

SCALE 2 - GROUP INTEGRATION

Students with high scores view themselves as vital members of a group. The group respects and solicits input from the individual student in the decision-making process. Students with low scores do not see themselves as a member of a group and have difficulty in group dynamics. Three items highly related to this scale are: Do people care what you think?; Do you keep your problems to yourself?; Do most people understand you?

SCALE 3 - LEADERSHIP/ASSERTIVENESS

Students with high scores view themselves at the centroid of the decision-making process. They are confident about the quality, validity and reliability of their decisions and the processes which enabled them to reach those decisions. Students with low scores are not so sure about either. Three items highly related to this scale are: Do your friends consider you to be a leader?; Do you enjoy doing things more if you are the leader?; In arguments, does your point of view usually win?

SCALE 4 - INDEPENDENCE/RESPONSIBILITY

Students with high scores would rather make decisions for themselves because they see themselves as the ultimate beneficiary of those decisions. They have a clear set of values and are honest in their perceptions of themselves and others. Students with low scores would rather let others make decisions in which they have little confidence in the outcome. Four items highly related to the scale are: Would you rather let someone else decide important things for you?; Do you like to decide things for yourself?; Can you be depended on?; Do you have a clear feeling of what's right and what's wrong?

SCALE 5 - TASK-DECISION INSULARITY

Students with high scores on this scale have a tendency to vacillate in either task attendance or decision-making. Extrinsic factors taht impinge on a situation are often the causal agents that cause this student to act. The student with low scores is a self starter who acts with decisiveness and alacrity. Four items highly related to this scale are: Do you hate to be told what to do?; Do you start a lot of things that you never finish?; Do you try to put off big decisions as long as possible?; Do you try to avoid making difficult decisions?

SCALE 6 - LOGICAL ENTROPY

Students with high scores on this scale plan their decisions very carefully with an attempt to integrate all perceived factors that influence the situation. The null set does not exist as a realistic option. The student with low scores on this scale will accept a problem as it exists and make limited attempts to solve it. The low-scoring student sees himself passively rather than actively involved in a situation. Four items highly related to this scale are: Plan your choice carefully, or let someone else decide for you; Pick the first decision that comes to your mind or carefully think the situation through; Follow your conscience or put off making the decision; Choose without thinking about it or use your common sense.

The Decision Making Scale is an instrument developed by IBEX to gauge the decision making processes of students. Scoring of the Decision Making Scale (DMS) is based on national norms. For each scale, a student receives a standard score (T score), representing a distribution with a mean of 50 and a standard deviation of 10. Responses to individual items are not given.

The results of the Decision Making Scales, Tables 24 through 28 are presented for tentative conclusions and recommendations only. All four grade level results, grades 9, 10, 11, and 12, suffer from the artifact of small sample population. Any conclusion drawn from the data should be considered tentative at best. As a result of this, no comparison will be drawn among grade levels.

Two patterns do seem to emerge from the data. One is that career education students do very well on scale 2, Group Integration. This is a most positive indication as it indicates that students do see themselves as vital members of a group which respects them for their contribution to the group.

A less positive tendency is that career education students who took the DMS do not fare as well as the norm group on scale 5, Task-Decision Insularity. A low score on this scale is desirable. No reason for this finding can be given.

The results of the Career Interest Survey, Table 23, an instrument administered in the tenth grade, seems to reinforce the data gathered in the DMS. The tenth grade students who took the instrument have the highest score on scale 5, Task-Decision Insularity. The career aspirations the students exhibited and their plans for after graduation seem realistic and in concert with their scores on scale 5.

Classroom Observations

Mr. Melvin Riggs, a trained, experienced educator conducted the classroom observations for IBEX, Incorporated. The observations consisted of Mr. Riggs being present in the classroom for a full period and a teacher conference either before or after the observation period. The total number of observations was 91. The results of the observations are as follows and are presented in an item-by-item format in Appendix A.

The results of the classroom observations indicate that the career education classrooms in Washington D.C. have adequate materials, both commercial and teacher-made. These classrooms have available for student use audiovisual materials and other materials such as magazines, catalogues and newspapers. Student work is also prominently displayed.

The quality of instruction given to students is also excellent. Students are given individual assignments of appropriate difficulty for the student. Pupils are aided by both teacher and aides in active and purposeful activity.

The emphasis in the classrooms observed was on individual instruction and this is reflected in the findings of the use of intra class groupings. The tendency was definitely away from the rigid controlled classroom environment to one which was dynamic and stimulating. Teachers moved about the classroom and students helped each other with their work.

Student behavior was also observed as a parameter of the career education classroom. The results indicate that a large majority of students exhibited positive social behavior, were task oriented, cooperative, responsive and showed interest in their work. They also appeared to be contented with the environment that they found themselves in.

The environment in which the students were observed was the classroom. The results of this observation show that the career education classrooms are open, friendly and relaxed. This supports the previous data which delineates the other parameters of the classroom.

As the integral member of the classroom, the teachers were also observed. Their behavior was described, in a majority of cases, as responsive, understanding, steady and responsible. Less consensus was observed in describing the teacher as kindly, stimulating, or original in her actions. The teachers were described, in a majority of cases, as exhibiting responsible and systematic actions. Both of the latter certainly added to the warm atmosphere of the observed classroom.

In summary, the observed classrooms, teachers, and students presented a positive and interesting picture of the career education classroom; a place in which learning can surely take place.

Staff Attitudes Toward Career Education

The assessment of staff attitudes toward career education concerned two areas: attitudes toward career education as an entity in school programs and attitudes toward this particular career education project. In concert with this design, 21 school principals were interviewed and a Career Education Practices Survey was sent to each teacher.

The results of the principals interviewed are presented first and are followed by the results of the teacher survey. According to 21 interviewed D.C. City School principals, the philosophy of Career Education in Washington, D.C. is to widen school children's exposure to a broad spectrum of occupations and careers. Through this exposure, students come to appreciate the relevance of traditional school studies as prerequisite for later specific training or employment. As students succeed in developing skills, preparatory for employment, they come to feel better about themselves.

These twenty-one principals indicated that they support the career education program for a number of reasons. One reason is that career education studies broaden the students' awareness to include a wide variety of career opportunities and to appreciate the number of life style choices that accompany occupational choices. As students see the link between acquisition of traditional school-taught skills and the number of life/

career choices available, they are motivated to apply themselves to learning. Through "hands on" experiences students with varying talents and abilities come to know success. The career education program seems to sustain a belief in a psychically, as well as a financial rewarding life.

Principals described many special career education efforts. These efforts included career education days, career education weeks, and participation in a Career Expo. Team meetings in one school facilitated planning. In other settings, parents as well as teachers were involved in career education program planning and the execution of the program. Field trips to cultural centers and to the sites of "jobs-in-action" enriched the career education program. Traditional classes integrated career education materials into their curricula. Role-playing experience afforded students the opportunity to practice interviewing techniques and to make "mock" applications for jobs. One school developed a career education tape for its own use and later shared this tape with other schools.

Certain classroom activities met with particular success. Several Principals mentioned that field trips to occupational settings were positive student experiences. Students enjoyed creating projects for public display. One school exhibited projects at a local university hospital. Those activities that involved cooperative unit development - students working with teachers; parents working with teachers; teachers from various disciplines (science, history and English) working

together - were particularly well received. Students enjoyed applied experiences, through role playing and through directed lessons in occupations. "What Goes into the Operation of a Radio Station" was one such directed lesson. Again and again the Principals pointed out that Career Education provides insight into the importance of traditional learning skills as they relate to job success.

Principals indicated that the Career Education Staff provided many services and helping materials. Staff development and training courses were made available. Consultants helped with planning. Program communication was fostered through the Career Education newsletter, monthly Principal meetings, and teacher-parent meetings. Funds for a variety of classroom materials, textbooks, and audio-visual accessories were provided as well as financial backing for field trips and the services of teacher aides.

When asked "how could the Career Education Staff be of more assistance?", the Principals enumerated several common concerns and several individual ones. Many Principals spoke of the need for better Career Education Department Staff-School communication. Several Principals suggested that each school have its own Career Education staff member or aide to coordinate the school's Career Education program. Several suggested that weekly or twice-weekly visits from a Career Development coordinator would be helpful. Several Principals indicated the need for courses in Career Education to be made available on the premises of individual schools to train teachers not enrolled in formal classes at the Career Education center. The need was expressed

again and again for subject area specialists to more fully demonstrate ways of bringing career study into traditional subject areas. Other specific wants included: the purchase of security boxes for equipment; a more specific "skills" program for junior high students; more assistance in correlating math and shop curricula with Career Education; and supplementary pay for additional planning time on non-teaching days.

The results of the Career Education Teachers' Practices Survey indicate the reason for the success of this career education project. The results are presented in Tables 29 and 30. The results of this instrument confirm the data from the observations of the classroom.

IBEX has evaluated several career education projects during the past year and this particular instrument was a part of most of these evaluations. The career education project in Washington, D.C. is notable for the exceptionally strong support for career education that it indicates. Of particular significance is the high degree of teacher support in the integration of basic skills with career education concepts. Of the teachers responding, 55.3% indicated that they integrated basic skills with career education concepts more than once a week. Interrelation of concepts and careers was also very high. Forty-seven percent of the teachers responding stated that they interrelated career education concepts and careers at least once a week.

One factor, joint planning, could use some improvement, as forty-six percent of the responding teachers never joint planned at Browne Junior High School. This finding is understandable, however, when one reviews the distance some teachers would have to travel to use the facility.

Several other factors impinge on the expansion of joint planning. These factors are: variable inter and intra school schedules, and an increase in the absolute number of schools served with no attendant rise in career education staff.

Community Involvement

There was not an objective measure of community involvement taken for this year's evaluation, partially as a result of the limited effect of last year's evaluation. The evaluation team is aware of the efforts put forth by the Career Education Staff in the area of community and administrative involvement. We are also aware of the many meetings and conferences held by the project staff repeatedly throughout the year. We could only report the efforts of the staff and nothing about the impact of those efforts.

Some subjective measures of community support exist and should be mentioned. The evaluation team was asked and was privileged to attend "Career Expo". The excellent community attendance and the degree of community interest demonstrated by the attendees indicated to us that substantial community support exists for the career education program.

The attendance of the Superintendent, Dr. Sizemore, and of Dr. Hoyt left little doubt in our minds that substantial administrative support exists for the program at the highest local and federal level.

It should also be noted that the students who were participating in the Career Expo exhibited great enthusiasm for, and knowledge about, the career education project in their schools.

Budget Consideration

The 1974-75 evaluation of the career development exemplary project carefully studied and reported the start-up and maintenance costs for a career development classroom. Table A repeats and extends information from that report concerning the per pupil cost of D.C. career education.

TABLE A

Annual Total and Per Pupil Cost for the
Career Development Exemplary Project for
FY 1971 - 1972 - 1973 - 1974 - 1975

Year	Total Budget	Number of Students Served	Per Pupil Cost
1971	\$205,813.00	650	\$ 316.63
1972	219,437.00	823	266.63
1973	345,024.00	2662	129.61
1974	342,724.00	3155	108.63
1975	295,596.89	5507	53.67

As would be expected, the annual per pupil cost has been decreasing since the first fiscal year. The decreases are dramatic as students are added each year. The addition of the Title I funds to the Vocational Education funds for FY 73, 74 and 75 made a significant change in the per pupil cost. Certain budget restrictions made it necessary to allot Title I funds in unique ways.

The reduction of the per pupil costs over the four-year period suggests a general and recurring cost of approximately \$100.00 per pupil per year to implement the Washington, D.C. Career Education model once a start-up period is completed.

Projects may be viewed as a combination of a variety of components and the components studied for their individual costs. Some caution should be used when viewing projects for components costs, for often a single component funded separately could not operate.

The proposed and expended budget for the career education project has been reviewed by the Evaluator and the expenditures support the product results previously discussed. Based on the results of the product factors, the Evaluator recommends that the field trip fund for the K-3 and 4-6 grade levels be expanded. Evidence available indicates that these grade levels show great benefit from exposure to various career milieus.

Cost Analysis

A review of the cost of implementing the CEIC project shows that the program is not without additional costs, but not completely prohibitive. The District will find it necessary to increase the per pupil allotment by about \$100.00 to implement the model as it is now operating. It is IBEX's position that the District will find it in the best interest of its students to begin planning now for the expansion of career education concepts into all schools. This process should begin to designate future monies for the program.

Model Generalizability

The District of Columbia Schools seeks answers to questions regarding the feasibility of adopting or adapting the CEIC model in some or all of the D. C. schools. Decisions regarding the institutionalization of career education throughout the system are generally based upon a review of other aspects of the evaluation. In light of the problems and processes involved in the expansion of career education, the following sections review certain aspects of the model as they relate to generalization.

Product Outcomes

A review of the variety of student, plus teacher and administrator outcomes previously presented in the earlier sections of this report and in the 1973-74 report, support the conclusion that the expansion of the model would have significant positive effect on the performance of students generally, and especially regarding their attitude toward self, the world of work and the career selection process.

The outcomes of the teacher and the administrator data suggest a high degree of support for the program. The reasons for this high degree of program support should be examined in detail. On the basis of these outcomes, we recommend expansion and dissemination of the model.

APPENDIX A

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Study Population

GRADE 1

<u>Teacher</u>	<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>
M.J. Browne	Cleveland	18	X
B. Neal	Drew	25	X
G. Graig	Gooding	18	X
J. Cannon	Gooding	19	X
T. White	Lenox	24	X
J. Diggs	Ludlow-Taylor	26	X
Sister Rogers	Sts. Paul & Augustine	26	X
V. Harris	Seaton	32	X
C. Johnson	Scott-Montgomery	25	X
A. Robinson	Syphax	25	X
L. Branson	Syphax	25	X
F. Parks	Tyler	30	X
P. White	Tyler	30	X
O. Washington	J.O. Wilson	26	X

GRADE 2

<u>Teacher</u>	<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>OAS</u>
H. Dutch	Bundy	21	X	
N. Rasmussen	Bundy	13		X
M.J. Browne	Cleveland	6	X	
T. Cochran	Drew	25		X
P. Uzzell	Lenox	25	X	
L. Miles	St. Paul & Augustine	32		X
Sylvia Shaw	Syphax	24	X	
E. Johnson	Tyler	27		X

GRADE 3

<u>Teacher</u>	<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>OAS</u>
G. Chamberlain	Amidon	26	X	
N. Rasmussen	Bundy	9		X
M.R. Wilbanks	Cleveland	24	X	
E. Davis	Drew	27		X
D. Upson	Gooding	27	X	
D. Reed	Lenox	25		X
D. Abbott	Ludlow-Taylor	22	X	

GRADE 4

<u>Teacher</u>	<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>OAS</u>
P. McFall	Amidon	27	X	
B. Harris	Amidon	27		X
D.M. Rusking	Bundy	31	X	
J. Perry	Drew	23		X
E. Bannister	Gooding	24	X	
J. Reagan	Lenox	28		X
D. Shields	Ludlow-Taylor	24	X	
McClay Ivy	Ludlow-Taylor	25		X
D. Cathwell	Ludlow-Taylor	25	X	
E.R. Jackson	Scott-Montgomery	33		X
M. Stewart	Tubman	26	X	
G. Brown	Tyler	25		X
H. Elder	Tyler	23	X	
H. Jones	Tyler	25		X

GRADE 5

<u>Teacher</u>	<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>OAS</u>
G. Patterson	Bundy	16		X
W. Blount	Drew	25		
C. Penn	Drew	24	X	
O. Deshields	Gooding	25		X
D. Jefferson	Lenox	28	X	
R. Taylor	Ludlow-Taylor	24		X
L. Colkins	Ludlow-Taylor	13	X	
L. Archey	Seaton	28		
B. Quattlebaum	Tubman	24	X	X

GRADE 6

<u>Teacher</u>	<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>CADI</u>
A. Hawthorne	Bowden	27	X	
B.S. Williams	Bundy	22		X
M. Jenkins	Gooding	25	X	
N. Johnson	Gooding	26		X
P. Gray	Lenox	18	X	
L. Colkins	Ludlow-Taylor	13		X
V. Smith	Ludlow-Taylor	23	X	
D. Martin	Seaton	25		X
C. Butler	J. O. Wilson	25	X	

GRADE 7

<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>CADI</u>
<u>Terrell</u>			
E.R. Anderson	75	X	
A.E. Harris	26		X
P.R. Humble	28	X	
R. Logan	56		X
V. Saxton	47	X	
E. Mitchell	28		X
<u>Jefferson</u>			
W. Clossenn	43		X
J.J. Gibbs	50	X	
P. H. Shimer	51		X
F. Scott	51	X	
V. Dougherty	60		X
C. Stanley	31	X	
B. Alexander	41		X
C. B. Broadus	110	X	
R. Compton	140	X	
G. Petree			
J. Walker			
Otis C. Watkins	102	X	
Elizabeth A. Davis	49		X
S. A. Mullen	100		X
J. Zimmerman	32		X
<u>Hamilton</u>			
Charlene M. Cooper	36	X	
Lillian E. Logan	33		X
Charles E. Reid	31	X	
<u>Randall</u>			
Joyce Armstrong	32	X	
Martha Boxley	23		X
Mary E. Flourney	54	X	
Josephine M. Foster	60		X
Louise Madden	50	X	
Naman Mitchell	48		X
Pedro Richmond	45	X	

GRADE 7 (cont'd.)

<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>CADI</u>
<u>Shaw</u>			
Jean Adama	60	X	
James Amick	60		X
Bettye Brooks	32	X	
Sylvia Nolan	60		X
Charles Pettigrew	31	X	
Teretha Walkins	90		X
Kuth Wheeler	35	X	
 <u>Stuart</u>			
Walter Bryant	23		X
Yvette Goodloe	66		X
Edward Merriweather	67	X	
Jacqueline Pegram	30		X
Marguerite Reed	30	X	

GRADE 8

<u>School</u>	<u>No. Pupils</u>	<u>SOS</u>	<u>CADI</u>
<u>Terrell</u>			
A.E. Harris	36	..	X
P.R. Humble	74	X	
R. Logan	75	..	X
V. Saxton	137	X	
E. Mitchell	32	X	
<u>Jefferson</u>			
W. Clossenn	28		X
C. Stanley	90	X	
B. Alexander	14		X
C.B. Broadus	34	X	
R. Compton	100		X
D. Petree	119	X	
J. Walker	65		X
Elizabeth A. Davis	20		
S.A. Mullen	120	X	
<u>Hamilton</u>			
Cleo D. Bowden	35	X	
Wellesley Washington	20		X
Edward T. Williams	30	X	
<u>Shaw</u>			
Ethel Boardley	32		X
Bettye Brooks	40	X	
<u>Stuart</u>			
Walter Bryant	60		X
Annie DeLaine	34	X	
Georgina Lomax	65		X
Linda Lowry	47	X	
Marguerite Reed	31		X

GRADE 9

<u>School</u>	<u>No. of Pupils</u>	<u>SOS</u>	<u>CADI</u>
<u>Terrell</u>			
E. R. Anderson	33	X	
A.E. Harris	31		X
P.R. Humble	21	X	
R. Logan	73		X
V. Saxton	27	X	
E. Mitchell	24		X
<u>Jefferson</u>			
W. Clossenn	13		X
F. Scott	26	X	
V. Dougherty	22		X
C. Stanley	35	X	
B. Alexander	18		X
C.B. Broadus	33	X	
R. Compton	60		X
D. Petree	30	X	
J. Walker	6		X
Otis C. Watkins	31	X	
Elizabeth A. Davis	19		X
S. A. Mullen	90	X	
J. Zimmerman	60		X
<u>Shaw</u>			
Ethel Boardley	30	X	
Ronald Miller	31		X
Charles Pettigrew	60	X	
Teretha Walkins	30		X
Ruth Wheeler	30	X	
<u>Stuart</u>			
Annie DeLaine	35	X	
Barbara Grissett	28		X
Mildred Jakcson	68	X	
Robert Williams	32		X

Dunbar Senior High School
HOMEROOM ROSTER

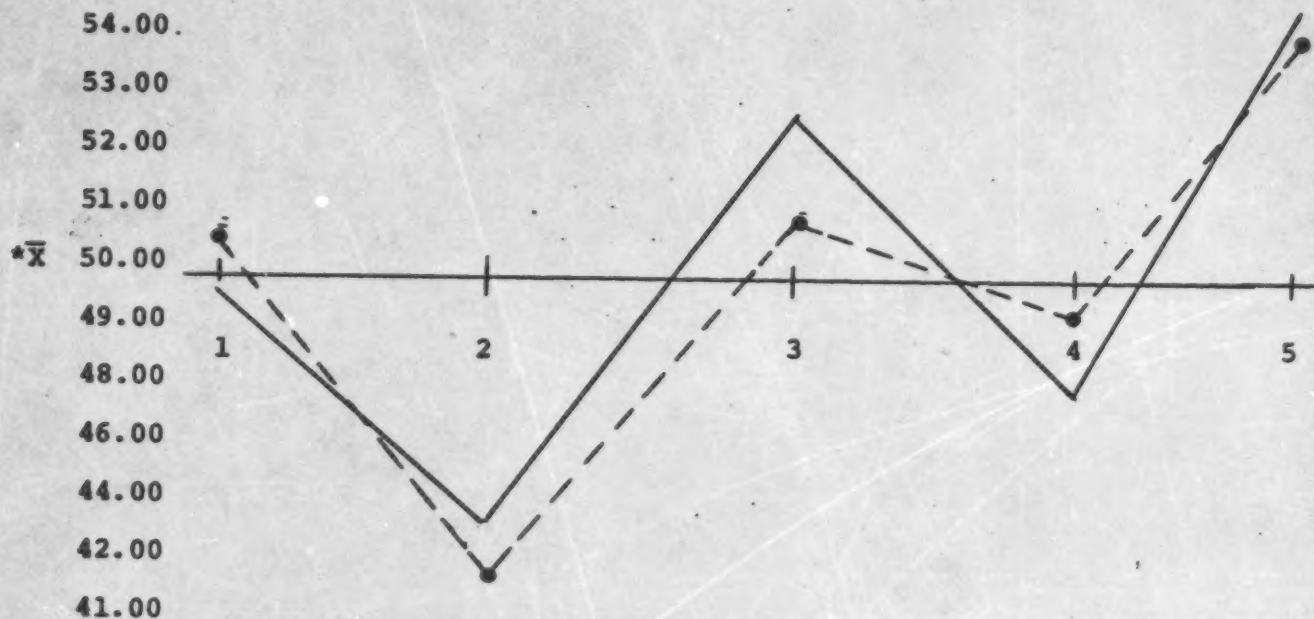
	<u>No. Pupils</u>	<u>SOS</u>	<u>DMS</u>
Mrs. O. Alexander	20	X	
Mr. L. Banner	18		X
Mr. J. Brinkley	9	X	
Miss R. Buffington	37		X
Mrs. M. Calbert	17	X	
Mrs. S. O. Cannon	21		X
Mr. J. Czernesky	15	X	
Mr. J. Davidson	16		X
Mr. J. Diggs	33	X	
Mrs. E. Donaldson	18		X
Mr. J. Elwell	4	X	
Mrs. D. Exum	17		X
Mrs. M. Exum	37	X	
Mr. E. Ferrell	12		X
Mrs. B. Forbes	16	X	
Mrs. W. Friday	18		X
Mrs. B. Galloway	19	X	
Mr. J. Garverick	16		X
Mrs. M. Gourdine	18	X	
Mr. R. Granes	39		X
Mrs. E. Gray	19	X	
Mr. L. Gray	26		X
Mrs. Z. Grundy	22	X	
Mr. J. Guglik	25		X
Mrs. E. Hamilton	33	X	
Mrs. L. Heard	31		X
Miss B. Hemby	15	X	
Mrs. D. Henderson	33	X	
Mrs. G. Jackson	13		X
Mrs. R. Kohng	20	X	
Mr. R. P. Kay	15		X
Miss T. Long	9	X	
Mrs. R.L. Lyons	16		X
Mrs. E. Matthews	22	X	
Mrs. F. Matthews	27		X
Mrs. R. Parham	32	X	
Mrs. W. Parton	22		X
Mr. C.O. Perry	29		X
Mr. A. Popofsky	33	X	
Mrs. P. Ramirez	23	X	
Mrs. N. Ruffin	11		X
Mrs. M. Saxon	2	X	
Mr. D. Sidewater	13		X
Mr. S. Simmons	29	X	
Mrs. J. Stewart	25		X
Mr. F. Tillman	14	X	
Mr. W. Trollinger	20		X
Miss I. Uston	12	X	
Mr. W. Whaley	29		X
Mr. S. White	27	X	
Mrs. A. G. Wilkinson	28		X
Mrs. M. Wilson	28	X	

TABLE 1

Schools of the District of Columbia
1974-75

Primary Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 1-3; $N_1=596$; $N_2=465$

	73-74	$\bar{X}$	74-75	73-74	S.D.	74-75
1. Self Acceptance	49.87		50.39	8.51		8.31
2. Social Maturity	43.17		41.67	10.06		9.38
3. School Affiliation	52.50		50.93	8.30		9.14
4. Self Security	47.90		49.28	10.20		8.49
5. Achievement Motivation	54.29		53.73	8.99		10.78



* 50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

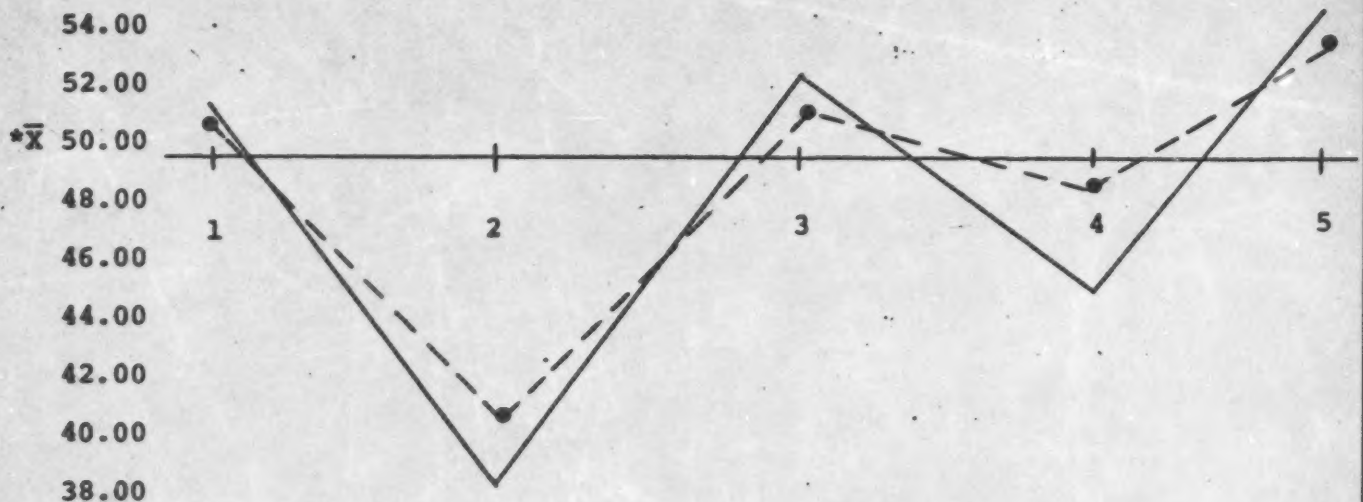
Legend: _____ (1973-74)
 ● - - - - - (1974-75)

TABLE 2

Schools of the District of Columbia
1974-75

Primary Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 1; $N_1=192$; $N_2=28$

	<u>73-74</u>	<u>$\bar{X}$</u>	<u>74-75</u>	<u>73-74</u>	<u>S.D.</u>	<u>74-75</u>
1. Self Acceptance	51.24		50.61	7.68		8.17
2. Social Maturity	38.00		40.66	9.46		9.33
3. School Affiliation	52.12		51.09	8.26		9.01
4. Self Security	44.90		49.40	11.59		8.44
5. Achievement Motivation	54.21		53.76	9.02		10.76



* 50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

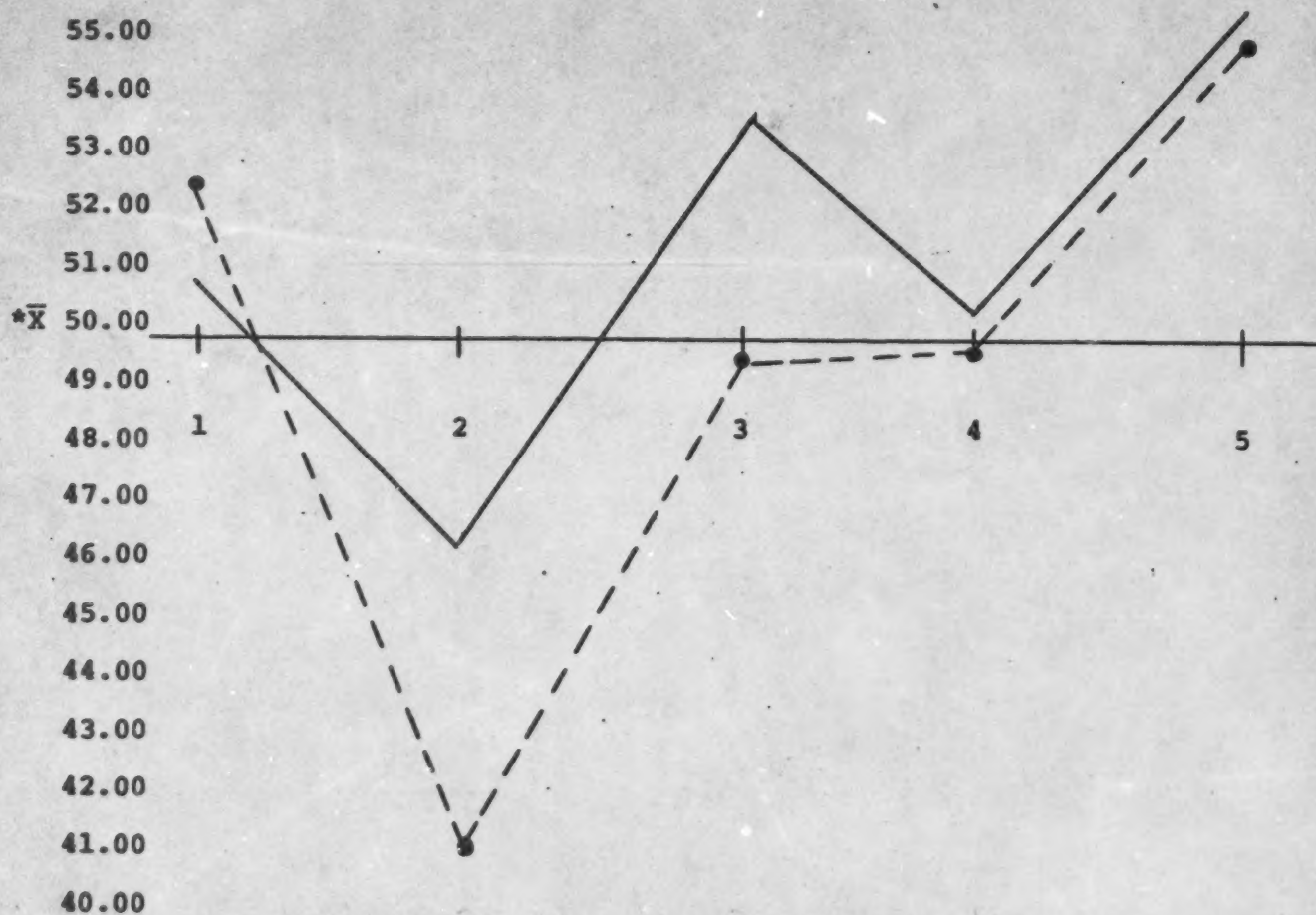
Legend: ————— (1973-74)
 • — — — — — (1974-75)

TABLE 3

Schools of the District of Columbia
1974-75

Primary Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 2: $N_1=149$; $N_2=201$

	73-74	$\bar{X}$	74-75	73-74	S.D.	74-75
1. Self Acceptance	50.76		52.07	8.91		8.02
2. Social Maturity	46.01		40.89	8.38		9.16
3. School Affiliation	53.56		49.56	8.05		10.31
4. Self Security	50.25		49.89	9.24		8.74
5. Achievement Motivation	55.12		54.96	8.39		10.17



50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

Legend:

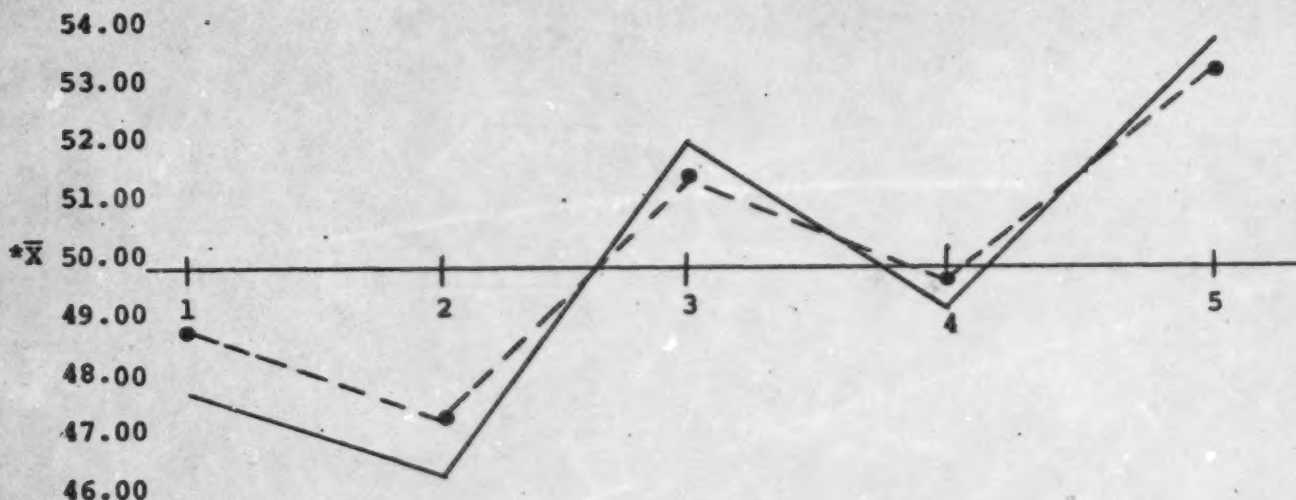
————— (1973-74)
- - - - - (1974-75)

TABLE 4

Schools of the District of Columbia
1974-75

Primary Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 3; $N_1=179$; $N_2=236$

	73-74	$\bar{X}$	74-75	73-74	$\frac{S.D.}{74-75}$
1. Self Acceptance	47.71		48.87	8.67	8.28
2. Social Maturity	46.26		47.60	9.64	8.04
3. School Affiliation	51.98		51.18	8.56	9.30
4. Self Security	49.24		49.97	8.52	8.11
5. Achievement Motivation	53.67		53.31	9.47	11.36



* 50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

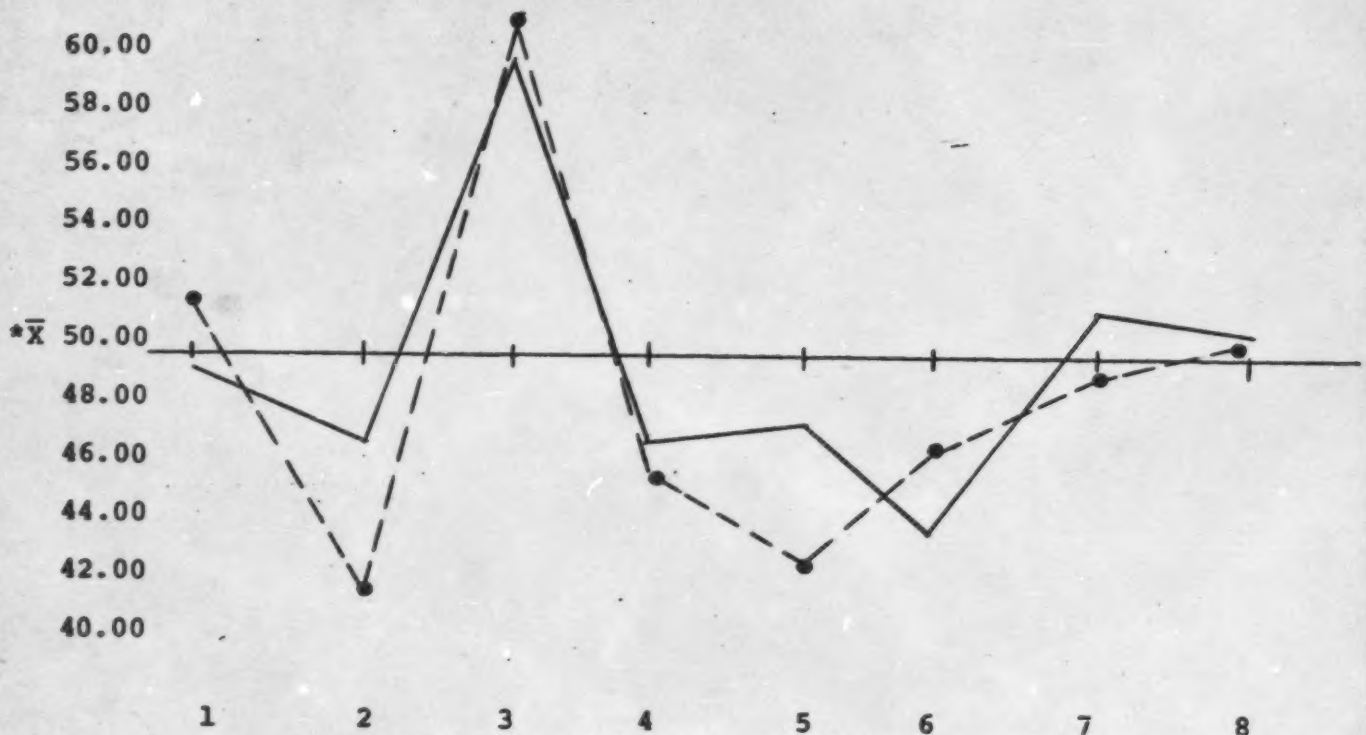
Legend: _____ (1973-74)
 • - - - - - • (1974-75)

TABLE 5

Schools of the District of Columbia
1974-75

Intermediate Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 4-6; $N_1=272$; $N_2=276$

	$\bar{X}$		S.D.	
	73-74	74-75	73-74	74-75
1. Self Acceptance	49.25	51.16	9.45	9.47
2. Social Maturity	46.11	41.64	10.40	13.07
3. School Affiliation	59.75	60.39	10.14	9.20
4. Self Security	47.00	46.03	10.24	10.36
5. Social Confidence	46.08	42.51	9.32	8.15
6. Peer Affiliation	43.47	46.11	9.70	10.67
7. Teacher Affiliation	50.44	49.82	9.12	9.50
8. Achievement Motivation	50.40	50.25	9.65	6.21



* 50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

Legend:

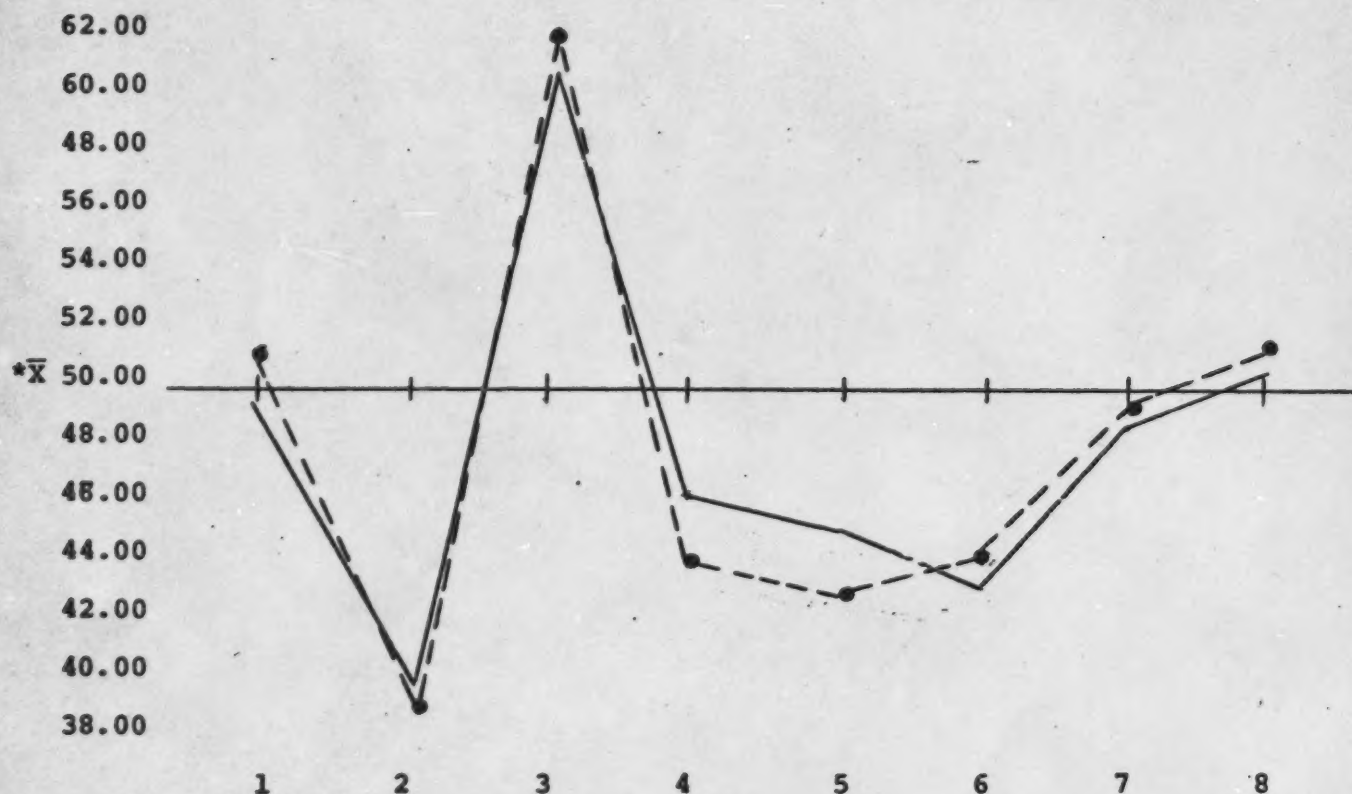
————— (1973-74)
- - - - - (1974-75)

TABLE 6

Schools of the District of Columbia
1974-75

Intermediate Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 4; $N_1 = 94$; $N_2 = 97$

	$\bar{X}$		S.D.	
	73-74	74-75	73-74	74-75
1. Self Acceptance	49.97	50.20	8.80	9.93
2. Social Maturity	39.21	38.63	11.87	13.24
3. School Affiliation	60.06	61.67	9.19	9.60
4. Self Security	45.42	43.36	9.64	10.71
5. Social Confidence	44.43	42.10	9.16	7.60
6. Peer Affiliation	42.16	43.60	8.56	11.05
7. Teacher Affiliation	49.03	49.58	8.22	8.60
8. Achievement Motivation	50.18	50.80	11.08	5.90



* 50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

Legend:

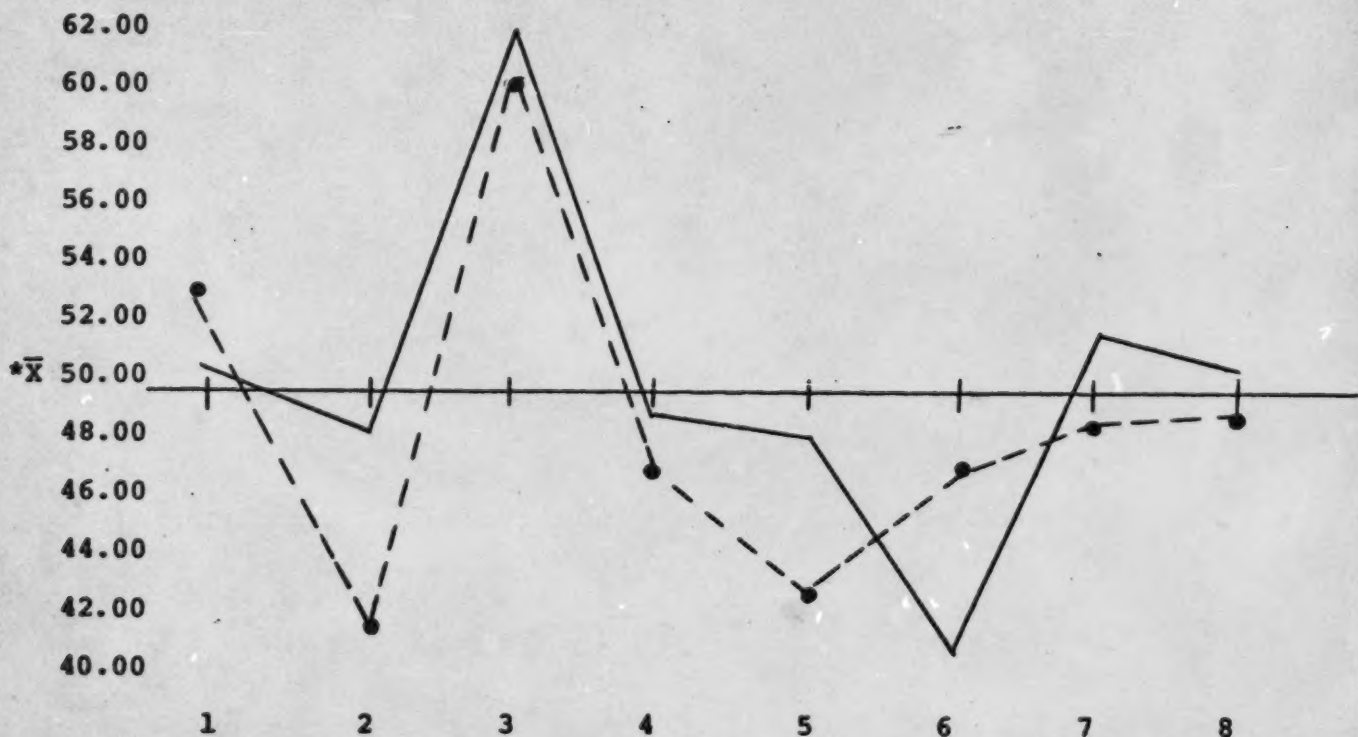
— (1973-74)
- - - (1974-75)

TABLE 7

Schools of the District of Columbia
1974-75

Intermediate Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 5; $N_1 = 81$; $N_2 = 114$

	$\bar{X}$		S.D.	
	73-74	74-75	73-74	74-75
1. Self Acceptance	50.11	52.60	10.36	8.80
2. Social Maturity	48.88	41.50	10.30	12.84
3. School Affiliation	61.51	59.78	10.86	9.29
4. Self Security	48.76	46.06	10.44	9.47
5. Social Confidence	48.53	42.16	9.78	7.82
6. Peer Affiliation	41.17	46.41	9.52	9.76
7. Teacher Affiliation	51.37	48.77	10.29	10.80
8. Achievement Motivation	50.76	49.50	9.57	6.05



* 50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

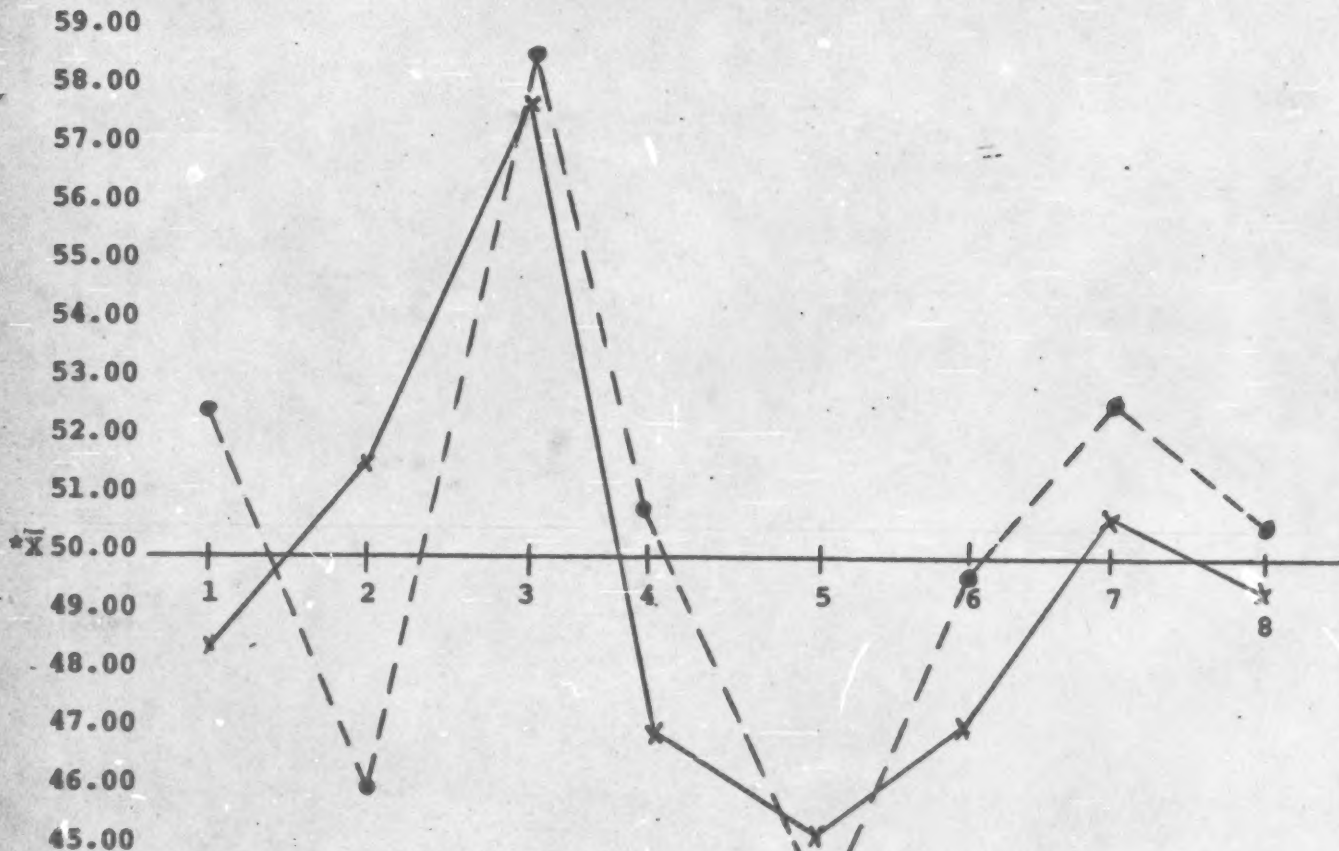
Legend: ————— (1973-74)
 • — — — — — • (1974-75)

TABLE 8

Schools of the District of Columbia
1974-75

Intermediate Self Observation Scales
Means and Standard Deviations
1973-74 (N_1) and 1974-75 (N_2)
Grades 6; $N_1=97$; $N_2=65$

	$\bar{X}$		S.D.	
	73-74	74-75	73-74	74-75
1. Self Acceptance	48.01	52.45	9.09	9.11
2. Social Maturity	51.56	45.61	9.21	11.26
3. School Affiliation	57.81	58.90	10.38	8.89
4. Self Security	46.95	50.59	9.98	9.92
5. Social Confidence	45.28	43.94	9.17	9.78
6. Peer Affiliation	47.28	49.88	10.76	9.82
7. Teacher Affiliation	50.94	52.72	8.86	10.47
8. Achievement Motivation	49.76	50.41	9.30	6.34



* 50.00 is a mean "T" with a forced S.D. of 10, based on normative procedures.

Legend: (1973-74)
 (1974-75)

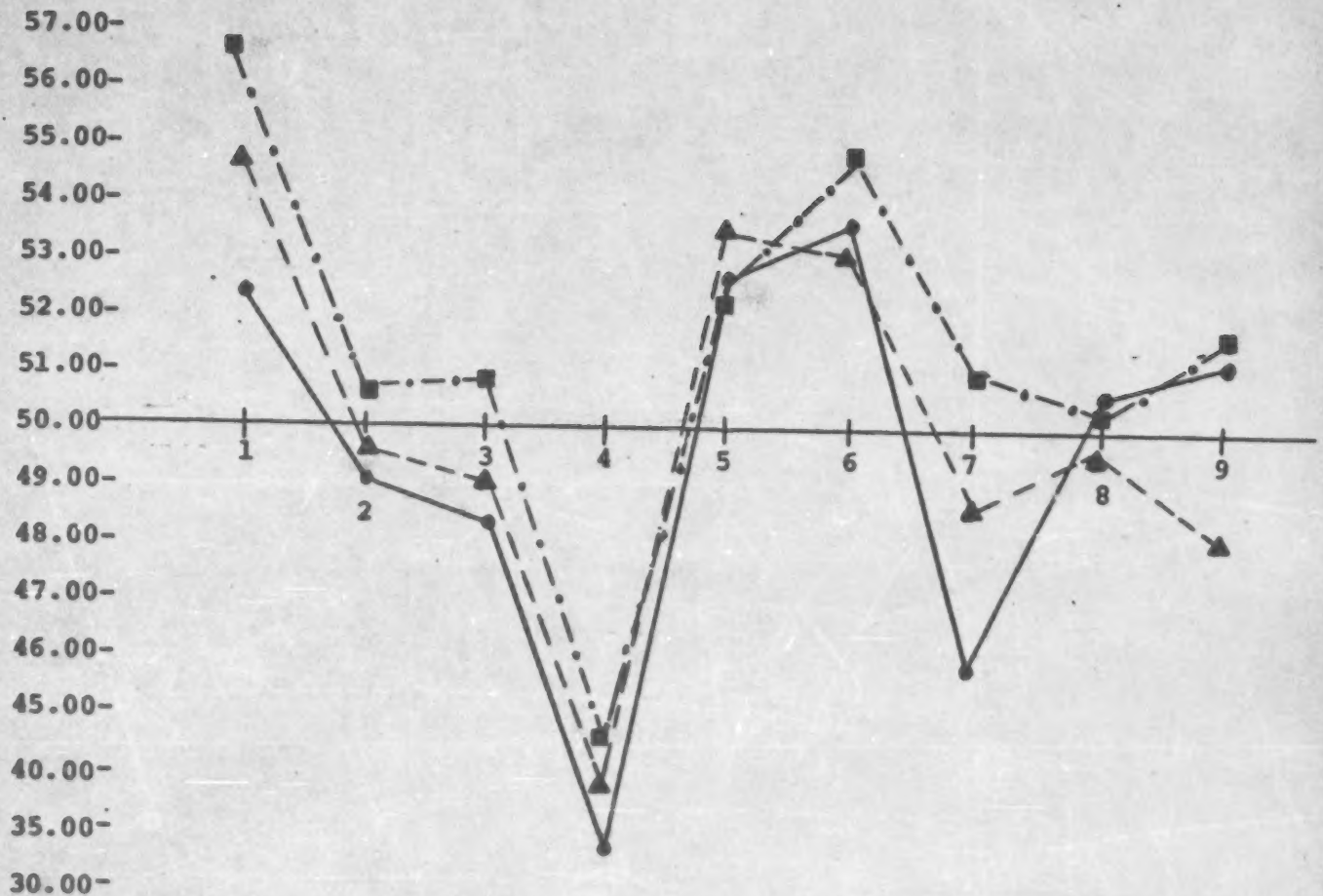
TABLE 9

Junior High Self Observation Scales
for Grades 7, 8 and 9
Means and Standard Deviations

Grade 6 (N=97) Grade 7 (N=44) Grade 9 (N=55)

Scales	Grade 7		Grade 8		Grade 9	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Self Assertion	52.1	9.4	54.5	6.7	56.6	5.4
Self Acceptance	49.1	9.1	49.6	9.4	50.6	8.5
Self Security	48.1	8.5	49.0	7.5	50.8	8.6
Social Maturity	46.7	7.4	38.7	8.1	42.4	10.4
Social Confidence	52.5	10.0	53.3	8.7	52.1	9.1
Family Affiliation	53.4	7.0	53.1	6.4	54.8	6.1
Peer Affiliation	45.9	8.6	48.7	7.6	50.8	5.8
Teacher Affiliation	50.3	7.4	49.9	7.5	50.2	7.9
School Affiliation	51.1	9.3	48.0	10.2	51.5	9.1

TABLE 10
Junior High
Self Observation Scales
Grades 7, 8 and 9



Legend:

7th Grade ●——●
 8th Grade ▲- - - -▲
 9th Grade ■-.-.-.-■

Scales

1. Self Assertion
2. Self Acceptance
3. Self Security
4. Social Maturity
5. Social Confidence
6. Family Affiliation
7. Peer Affiliation
8. Teacher Affiliation
9. School Affiliation

TABLE 11

RESULTS OF OCCUPATION AWARENESS SURVEY
BY CAREER CATEGORYGrade 2

Category	Pre	Post	Gain
Unskilled	19.21	99.36	+ 8.15
Trade	118.50	129.45	+10.95
Technical	97.78	87.74	-10.04
Semi-Professional	97.20	81.20	-16.85
Professional	93.65	104.50	+10.85

TABLE 12

RESULTS OF OCCUPATION AWARENESS SURVEY
BY CAREER CATEGORYGrade 3

Category	Pre	Post	Gain
Unskilled	89.83	101.36	+11.33
Trade	117.18	113.76	- 3.41
Technical	90.56	99.16	+ 8.60
Semi-Professional	103.86	97.53	- 6.32
Professional	93.56	101.33	+ 7.77

TABLE 13
RESULTS OF OCCUPATION AWARENESS SURVEY
BY CAREER CATEGORY

Grade 4

Category	Pre	Post	Gain
Unskilled	89.1	92.91	+ 3.81
Trade	125.18	113.43	-11.74
Technical	117.98	83.30	-34.64
Semi-Professional	80.90	115.00	+34.10
Professional	85.88	89.16	+ 3.28

TABLE 14
RESULTS OF OCCUPATION AWARENESS SURVEY
BY CAREER CATEGORY

Grade 5

Category	Pre	Post	Gain
Unskilled	86.94	99.55	+12.61
Trade	105.55	115.80	+13.25
Technical	80.42	79.85	- 0.54
Semi-Professional	117.52	112.66	- 4.86
Professional	120.63	96.36	-24.26

TABLE 15

The Schools of The District of Columbia

Primary Occupation Awareness Survey

1973-74 (N_1); 1974-75 (N_2)Grade 2 $N_1 = 107$ $N_2 = 166$ JAQ's of Students Elected to Respond to
Designated Want Ads

	<u>N_1</u>	<u>JAQ</u>	<u>N_2</u>		<u>N_1</u>	<u>JAQ</u>	<u>N_2</u>
Doctor	112.1		174.5	House-to-House Salesman	105.4		141.8
Teacher	134.6		138.1	Sales Clerk	141.3		152.7
Tickets/Local Theatre	123.4		130.9	Factory Worker	49.3		54.5
Secretary	125.6		101.8	Cook/McDonald's	188.4		185.4
Hotel Manager	87.5		105.4	Taxi Driver	78.5		105.5
Supermarket Cashier	127.9		144.0	Writer/"Motor Trend"	83.0		47.3
Police Cadet	130.1		149.0	Airline Pilot	83.0		54.5
Minister	92.0		83.6	House Cleaner	74.0		83.6
Truck Driver	112.1		94.5	Radio Announcer	58.3		65.4
Airline Ticket Sales	132.3		130.9	Auto Mechanic	98.7		64.4
Farm Worker	71.8		80.0	School Custodian	40.4		61.8
Fireman	89.7		65.4	Actor or Actress	74.0		58.2

TABLE 16

The Schools of The District of Columbia

Primary Occupation Awareness Survey

1973-74 (N_1); 1974-75 (N_2)Grade 3 $N_1=171$; $N_2=45$ JAQ's of Students Elected to Respond to
Designated Want Ads

	<u>N_1</u>	<u>JAQ</u>	<u>N_2</u>		<u>N_1</u>	<u>JAQ</u>	<u>N_2</u>
Doctor	101.1		122.7	House-to-House Salesman	103.9		101.3
Teacher	146.0		133.3	Sales Clerk	174.0		170.6
Tickets/Local Theatre	106.7		106.7	Factory Worker	47.7		26.6
Secretary	98.2		96.0	Cook/McDonald's	183.9		224.0
Hotel Manager	95.4		112.0	Taxi Driver	80.0		64.0
Supermarket Cashier	133.3		144.0	Writer/"Motor Trend"	84.2		53.3
Police Cadet	150.2		138.6	Airline Pilot	84.2		69.3
Minister	70.2		53.3	House Cleaner	81.4		80.0
Truck Driver	78.6		85.3	Radio Announcer	64.6		90.6
Airline Ticket Sales	113.7		106.7	Auto Mechanic	84.2		96.0
Farm Worker	78.6		117.3	School Custodian	40.7		53.3
Fireman	75.8		85.3	Actor or Actress	81.4		106.0

TABLE 17

The Schools of The District of Columbia
CDEP

Elementary Occupation Awareness Survey
1973-74 (N₁); 1974-75 (N₂)

Grade 4 N₁=111; N₂=86

JAQ's of Students Elected to Respond to
Designated Want Ads

	<u>N₁</u>	<u>JAQ</u> <u>N₂</u>		<u>N₁</u>	<u>JAQ</u> <u>N₂</u>
Doctor	112.4	160.0	House-to-House Salesman	139.5	80.0
Florist	62.0	40.0	Insurance Clerk	38.7	50.0
Child Care	170.5	125.0	Dental Assistant	69.7	45.0
Printer	93.0	100.0	Manager/Travel Agency	27.1	70.0
Teacher	236.4	260.0	Sales Clerk	205.4	215.0
Sanitation Worker	54.2	35.0	Factory Worker	23.2	30.0
Usher	108.5	100.4	Cook/McDonald's	286.7	320.0
Bookkeeper	127.9	160.0	Taxi Driver	50.4	75.0
Secretary	162.7	140.0	Law Aide	19.4	30.0
Stock Clerk	112.4	95.0	Writer/"Motor Trend"	34.9	40.0
Park Guide	302.2	325.0	Airline Pilot	85.2	65.0
Hotel Manager	108.5	125.0	House Cleaner	50.4	60.0
Plumber	58.1	35.0	Radio Announcer	58.1	60.0
Switchboard Operator	81.4	90.0	Auto Mechanic	73.6	70.0
Supermarket Cashier	205.4	170.0	Brick Mason	31.0	15.0
Police Cadet	174.4	195.0	Game Warden	65.9	85.0
Minister	58.1	55.0	Medical Assistant	42.6	30.0
Truck Driver	89.1	125.0	School Custodian	27.1	40.0
Airline Ticket Sales	162.7	100.0	Actor/Actress	155.0	115.0
Farm Worker	73.6	65.0	Accountant	96.9	70.0
Fashion Designer	151.1	90.0	Photographer	89.1	110.0
Editor	54.2	60.0			

TABLE 18

The Schools of The District of Columbia
CDEP

Elementary Occupation Awareness Survey
1973-74 (N_1); 1974-75 (N_2)

Grade 5 $N_1 = 41$; $N_2 = 58$

JAQ's of Students Elected to Respond to
Designated Want Ads

	<u>N_1</u>	<u>JAQ</u> <u>N_2</u>		<u>N_1</u>	<u>JAQ</u> <u>N_2</u>
Doctor	188.8	133.4	House-to-House Salesman	94.4	111.2
Florist	31.5	66.7	Insurance Clerk	10.5	29.6
Child Care	146.9	155.7	Dental Assistant	62.9	29.6
Printer	52.5	66.7	Manager/Travel Agency	42.0	66.7
Teacher	251.8	229.8	Sales Clerk	188.8	259.5
Sanitation Worker	42.0	51.9	Factory Worker	42.0	51.9
Usher	42.0	96.4	Cook/McDonald's	314.7	318.8
Bookkeeper	178.3	96.0	Taxi Driver	73.4	59.3
Secretary	157.4	111.2	Law Aide	31.5	29.6
Stock Clerk	52.5	126.0	Writer/"Motor Trend"	21.0	22.2
Park Guide	272.8	237.3	Airline Pilot	73.4	96.4
Hotel Manager	136.4	103.8	House Cleaner	94.4	96.4
Plumber	21.0	44.4	Radio Announcer	83.9	74.1
Switchboard Operator	52.5	74.1	Auto Mechanic	42.0	88.9
Supermarket Cashier	220.3	229.8	Brick Mason	00.0	22.2
Police Cadet	125.9	118.6	Game Warden	83.9	81.5
Minister	83.9	59.3	Medical Assistant	62.9	44.4
Truck Driver	73.4	118.6	School Custodian	31.5	29.6
Airline Ticket Sales	136.4	163.1	Actor/Actress	146.9	133.4
Farm Worker	42.0	51.9	Accountant	115.4	126.0
Fashion Designer	125.9	111.2	Photographer	157.4	133.4
Editor	125.9	59.3			

Student Career Awareness Development

The other experimental instrument used to assess the students' perceptions of the world of work (and their relationships with it) was the Career Awareness Development Inventory (CADI).

This instrument was developed to measure (1) the ability of students to relate social skills learned in school to job requirements; (2) the ability of students to relate academic skills learned in school to job requirement; and (3) the aspiration level of students (more carefully defined as economic understanding of each job).

Each of the CADI's three scales uses 15 multiple choice items. Scores on each scale are corrected for guessing and transformed linearly such that the maximum possible score is 25 and the minimum is 5.

Two major conclusions are shown by these results. First, the scores improve with grade level. Second, the students score highest on Academic Skills, followed by Social Skills and finally, by Aspiration Level.

Because this is a new instrument, still in the experimental stage, there are no useful norms. However, it has been given to over 10,000 students and interpretive and technical information will be available soon.

TABLE 19

The Schools of The District of Columbia

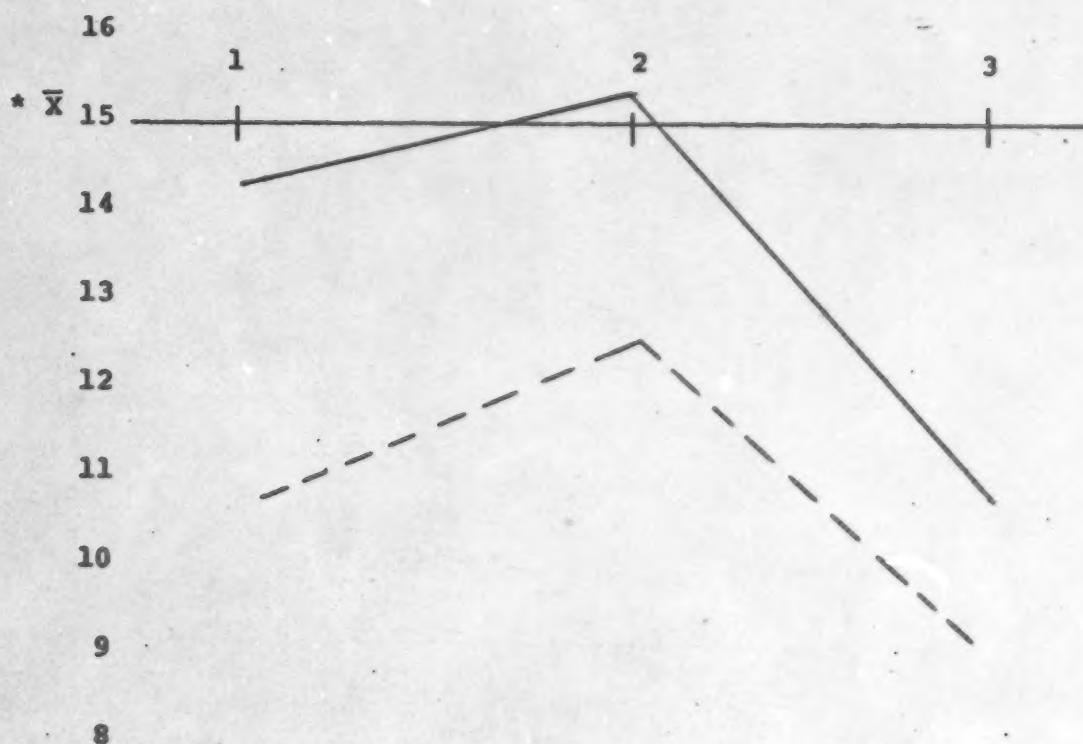
CEIC

Career Awareness Development Inventory

Means and Standard Deviations

1973-74 (N_1) and 1974-75 (N_2)Grade 6 ; $N_1 = 97$; $N_2 = 16$

	N_1	$\bar{X}$	N_2	N_1	S.D.	N_2
1. Social Skills	14.19		10.85	3.01		3.72
2. Academic Skills	15.39		12.65	3.46		3.75
3. Aspiration Level	9.75		9.18	1.67		2.83



* Line set at midpoint mean of 15.

Legend: _____ (1973-74)
 ----- (1974-75)

TABLE 20

The Schools of The District of Columbia

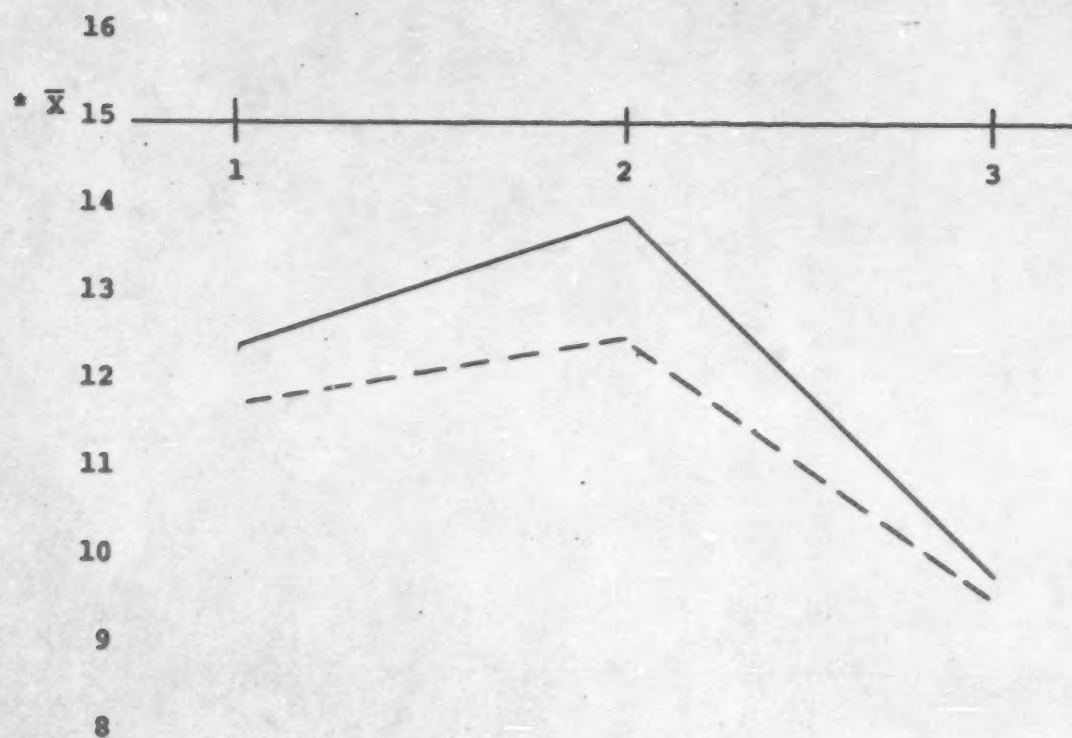
CEIC

Career Awareness Development Inventory

Means and Standard Deviations

1973-74 (N_1) and 1974-75 (N_2)Grade 7 ; $N_1 = 113$; $N_2 = 125$

	$\bar{X}$		S.D.	
	N_1	N_2	N_1	N_2
1. Social Skills	12.02	11.76	2.84	3.16
2. Academic Skills	13.67	12.57	3.19	3.63
3. Aspiration Level	9.91	8.63	2.30	3.16



* Line set at midpoint mean of 15.

Legend: _____ (1973-74)
 - - - - - (1974-75)

TABLE 21

The Schools of The District of Columbia

CEIC

Career Awareness Development Inventory

Means and Standard Deviations

1973-74 (N_1) and 1974-75 (N_2)Grade 8 ; $N_1 = 54$; $N_2 = 21$

	$\bar{X}$		S.D.	
	N_1	N_2	N_1	N_2
1. Social Skills	13.45	13.08	3.14	3.42
2. Academic Skills	15.47	15.27	3.43	3.65
3. Aspiration Level	9.49	11.06	1.89	3.23

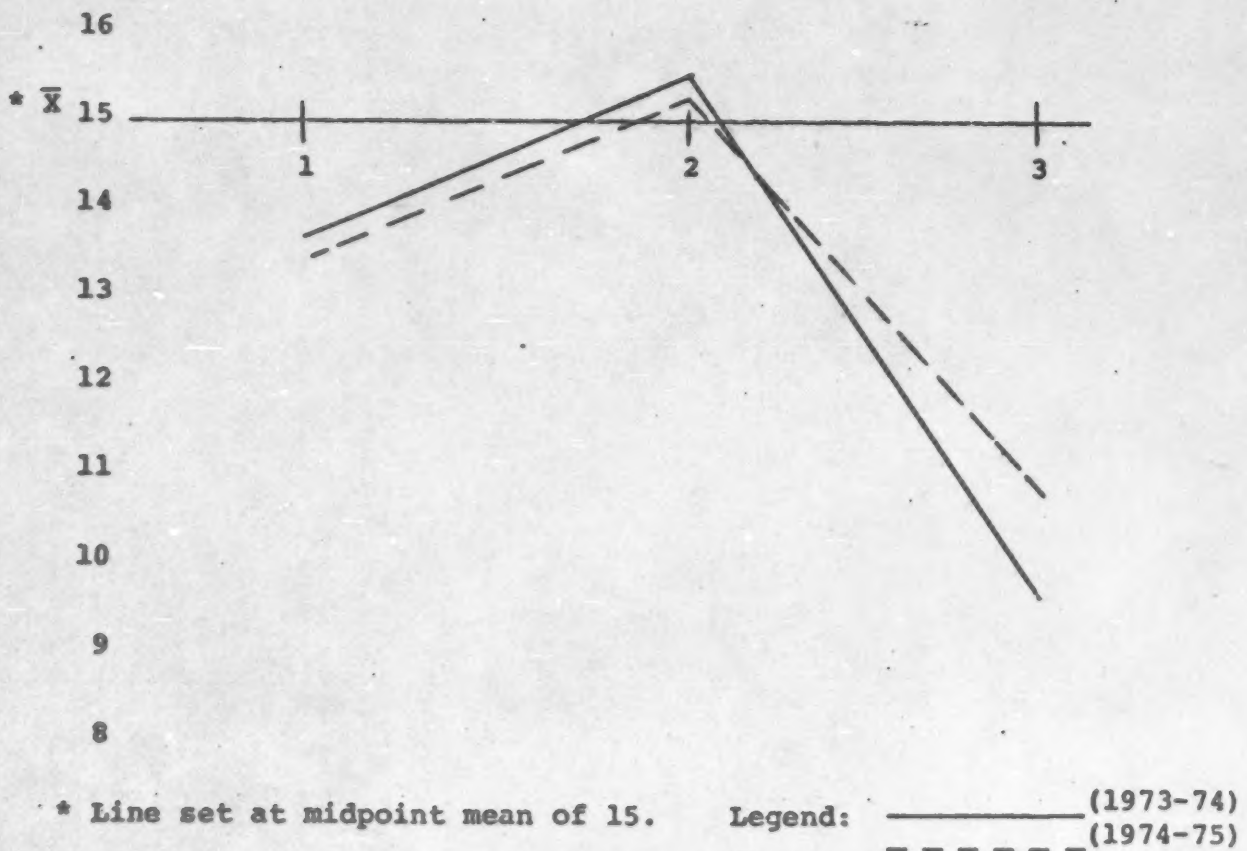


TABLE 22

The Schools of The District of Columbia

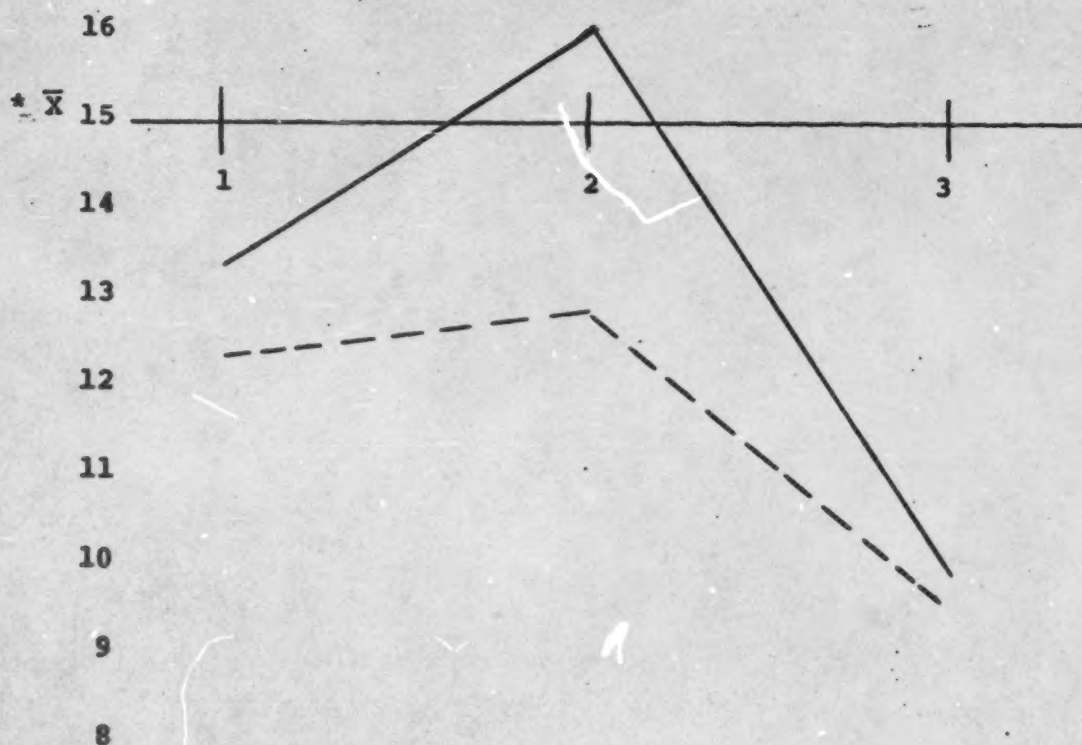
CEIC

Career Awareness Development Inventory

Means and Standard Deviations

1973-74 (N_1) and 1974-75 (N_2)Grade 9 ; $N_1=125$; $N_2=64$

	$\bar{X}$		S.D.	
	N_1	N_2	N_1	N_2
1. Social Skills	13.08	12.03	3.62	3.59
2. Academic Skills	16.00	12.71	3.97	3.50
3. Aspiration Level	9.92	9.60	1.93	2.38



* Line set at midpoint mean of 15.

Legend:

_____ (1973-74)
 - - - - - (1974-75)

TABLE 23
Career Interest Survey

Grade 10

41 Boys
36 Girls

Boys

1st choice:

1. Lawyer/attorney
2. Dentist
3. Music/instrumental
4. Bricklaying

2nd choice:

1. Auto mechanics
2. Driver (bus, truck, etc.)
3. Electrician
4. Mechanical engineer

Hobby

1st choice:

1. Basketball
2. Football
3. Baseball
4. Bicycling

2nd choice:

1. Basketball
2. Football
3. Motorcycling
4. Guns/hunting

After Graduation

1. Go to college
2. Go to work
3. Enter military service
4. Attend technical or
business school

Girls

1st choice:

1. Nurse
2. Child care
3. Secretary/stenographer
4. Medical technician

2nd choice:

1. Social work/counseling
2. Child care
3. Nurse
4. Model

Hobby

1st choice:

1. Cooking/baking
2. Baseball
3. African dance/culture
4. Gymnastics

2nd choice:

1. Tennis
2. Gymnastics
3. Bowling
4. Baseball

After Graduation

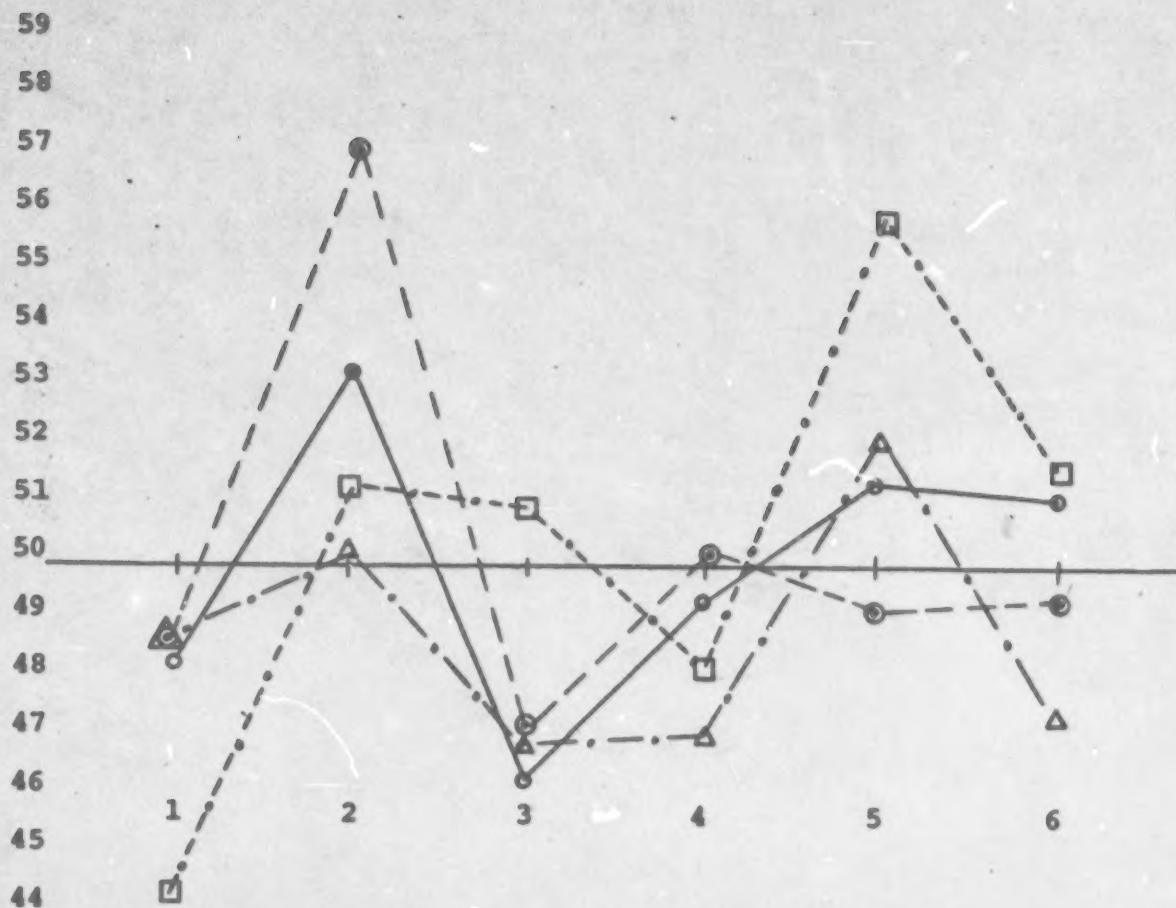
1. Attend college
2. Go to work
3. Attend Technical or
business school
4. No military service

TABLE 24

The Schools of The District of Columbia
Decision Making Scales

Grades 9, 10, 11, 12

- | | |
|-----------------------------|--------------------------------|
| 1. Decision Integrity | 4. Independence/Responsibility |
| 2. Group Integration | 5. Task-Decision Insularity |
| 3. Leadership/Assertiveness | 6. Logical Entropy |



Grade 9	○ — ○	N = 31
Grade 10	⊙ - - - ⊙	N = 33
Grade 11	△ - · - · - △	N = 37
Grade 12	□ - · - · - · - □	N = 23

TABLE 25

The Schools of The District of Columbia
Decision Making Scales

Grade 9

	Boys=19		Girls=12		Total=31	
	T Score	S.D.	T Score	S.D.	T Score	S.D.
1. Decision Integrity	46.4	8.0	52.0	9.7	48.6	8.9
2. Group Integration	53.6	9.1	54.3	6.7	53.9	8.2
3. Leadership/Assertiveness	44.7	6.6	48.2	10.2	46.1	8.2
4. Independence/Responsibility	49.7	10.1	48.4	4.9	49.2	8.4
5. Task-Decision Insularity	52.6	8.0	50.6	10.1	51.8	8.8
6. Logical Entropy	51.9	10.4	50.8	8.9	51.5	9.7

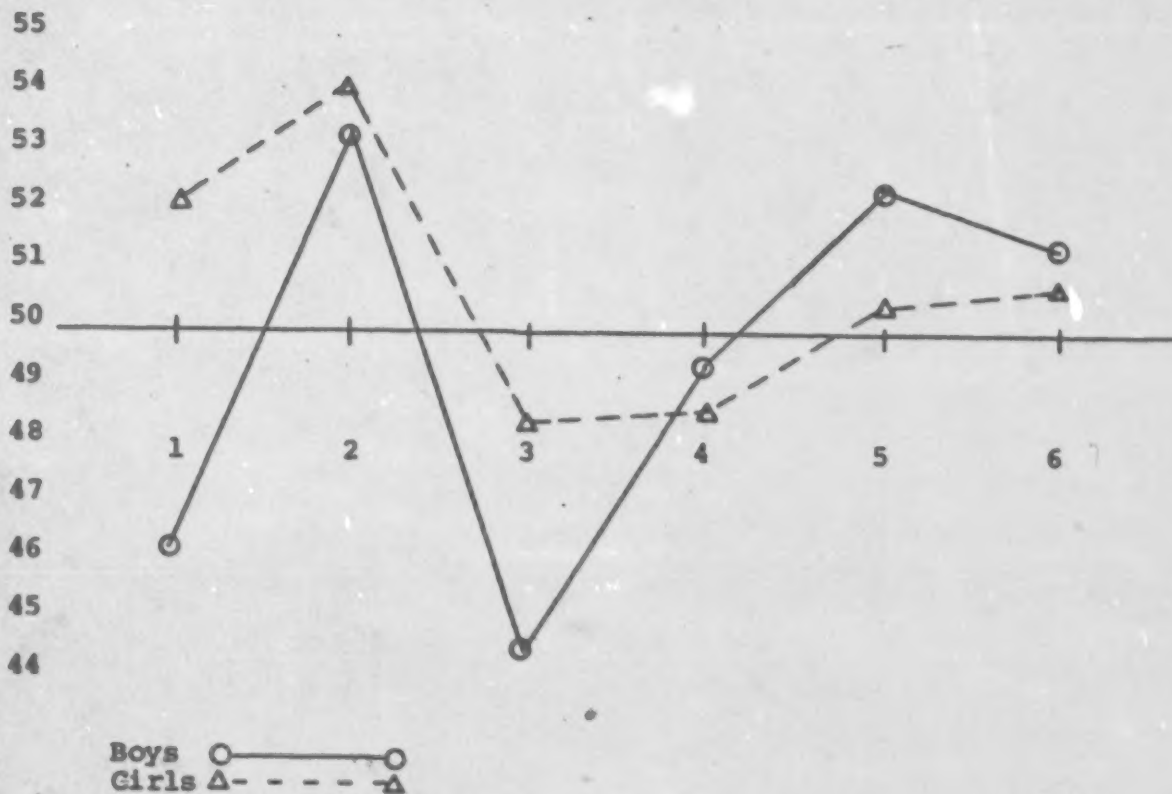


TABLE 26

The Schools of The District of Columbia
Decision Making Scales

Grade 10

1. Decision Integrity
2. Group Integration
3. Leadership/Assertiveness
4. Independence/Responsibility
5. Task-Decision Insularity
6. Logical Entropy

Boys=23		Girls=10		Total=33	
T Score	S.D.	T Score	S.D.	T Score	S.D.
49.1	7.3	48.2	8.8	48.9	7.7
56.7	9.4	58.4	7.8	57.2	8.8
46.7	7.9	50.2	5.1	47.8	7.3
50.9	8.1	49.4	5.4	50.4	7.3
48.4	6.7	50.6	3.8	49.1	6.0
48.9	6.7	52.3	10.8	49.9	8.1

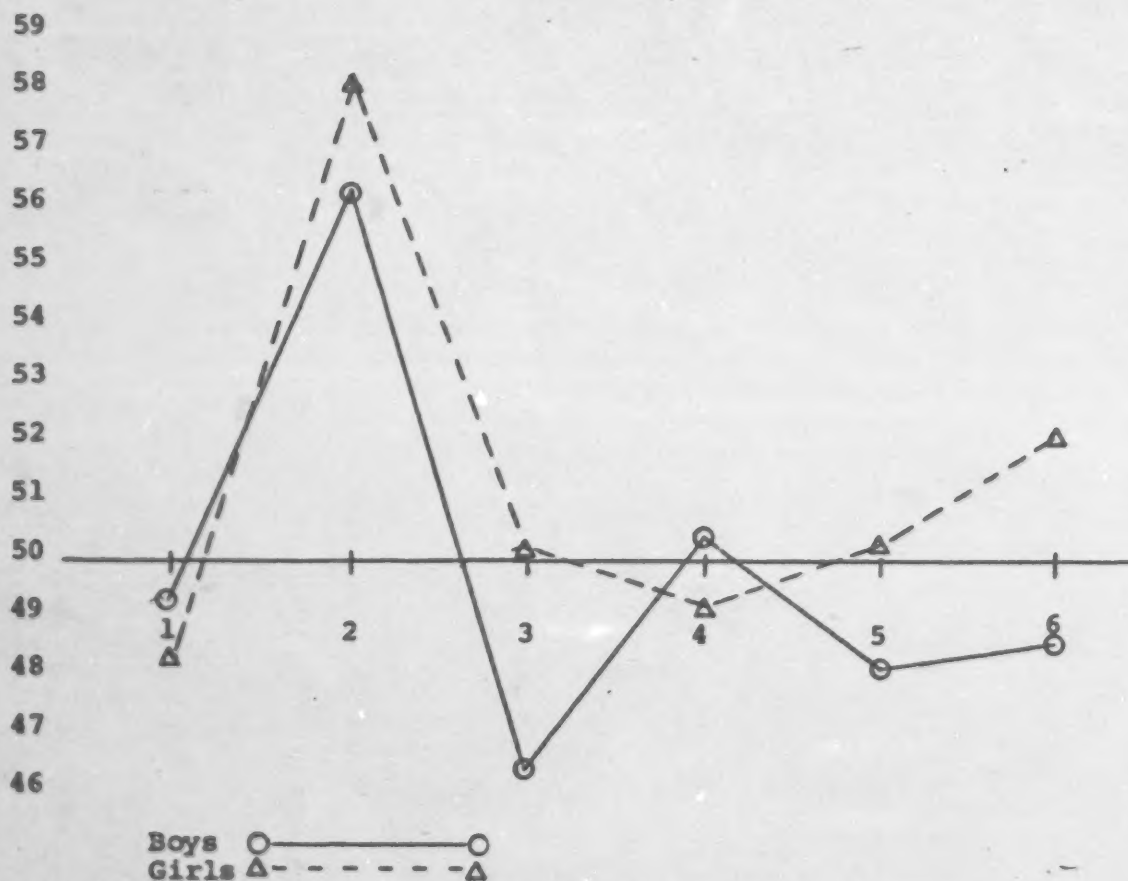


TABLE 27

The Schools of The District of Columbia
Decision Making Scales

Grade 11

1. Decision Integrity
2. Group Integration
3. Leadership/Assertiveness
4. Independence/Responsibility
5. Task-Decision Insularity
6. Logical Entropy

Boys=16		Girls=21		Total=37	
T Score	S.D.	T Score	S.D.	T Score	S.D.
46.3	9.2	50.9	8.7	48.9	9.1
50.6	9.6	50.3	7.4	50.4	8.3
44.8	8.7	48.8	8.0	47.1	8.5
47.4	8.2	47.6	9.0	47.5	8.5
55.2	6.9	51.2	8.4	52.9	7.9
45.8	4.4	48.4	8.0	47.3	6.8

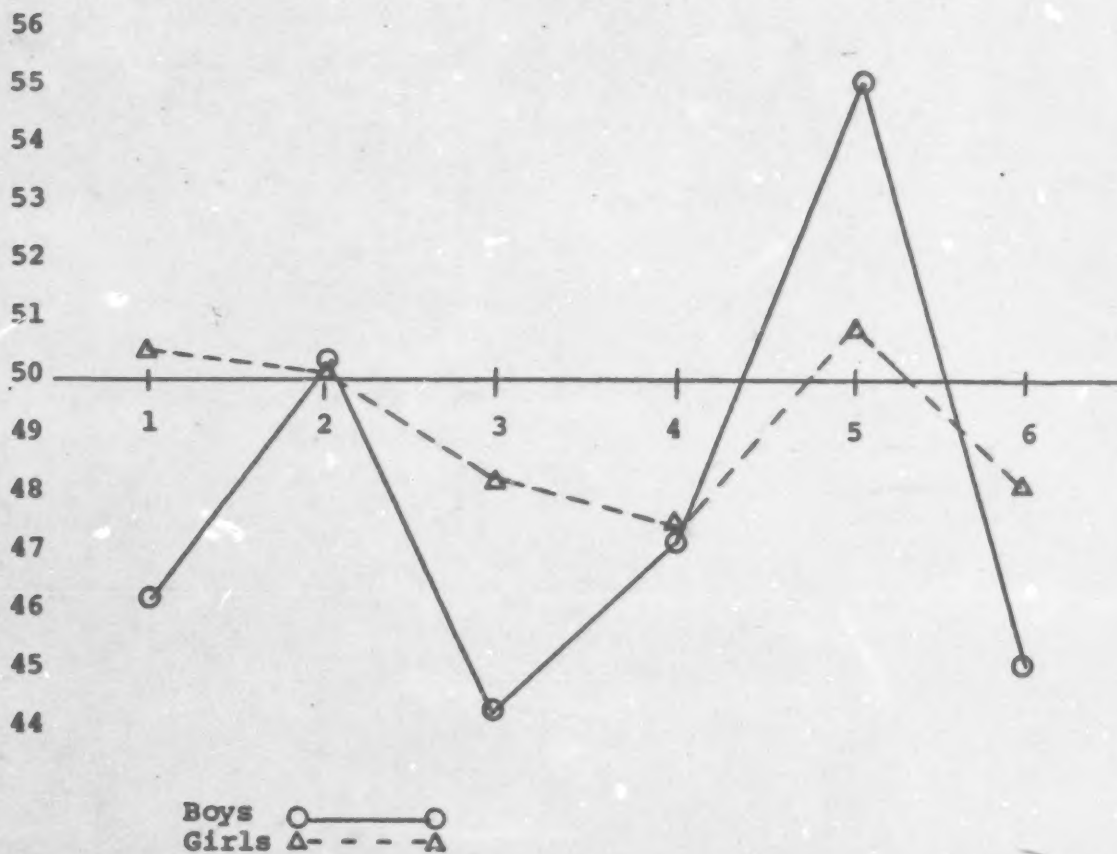


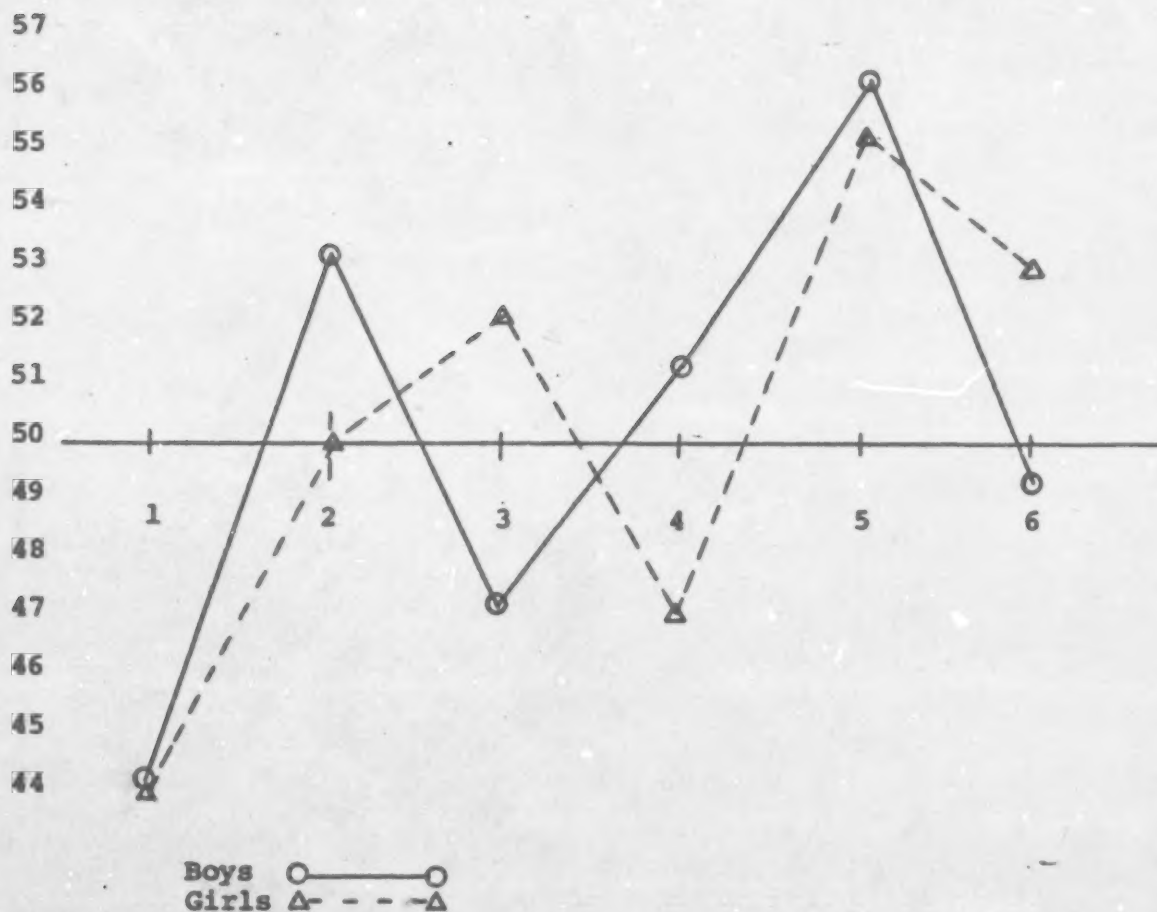
TABLE 28

The Schools of The District of Columbia
Decision Making Scales

Grade 12

1. Decision Integrity
2. Group Integration
3. Leadership/Assertiveness
4. Independence/Responsibility
5. Task-Decision Insularity
6. Logical Entropy

Boys=8		Girls=15		Total=23	
T Score	S.D.	T Score	S.D.	T Score	S.D.
44.8	9.4	44.6	6.1	44.7	7.2
53.2	8.6	50.0	7.8	51.1	8.1
47.7	9.2	52.8	10.3	51.0	10.0
51.6	12.1	47.1	4.9	48.7	8.1
56.3	10.0	55.8	7.4	56.0	8.2
49.7	7.9	53.1	13.7	51.9	11.9



RESULTS OF CLASSROOM OBSERVATIONS

USE OF MULTI-MEDIA TEACHING

Reference materials are available in classroom for use by both teacher and pupil. (e.g., encyclopedias, dictionaries, atlases, supplementary texts, supplementary books, etc.)

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0 types	6.0	6.6
1 type	3.0	3.3
2 types	8.0	8.8
3 types	8.0	8.8
4 or more types	63.0	69.2

Maps, globes and other models are available in the classroom for use by both teacher and pupil.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0 types	7.0	7.7
1 type	10.0	11.0
2 types	14.0	15.4
3 types	6.0	6.6
4 or more types	51.0	56.0

Teacher-made materials such as charts, games, and other aids are available of use by both teacher and pupils. (Note: this does not include student work.)

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0 types	1.0	1.1
1 type	6.0	6.6
2 types	13.0	14.3
3 types	12.0	13.2
4 or more types	59.0	59.3

Newspapers, magazines, catalogues, telephone directories, etc.
are available in classroom for use by both teacher and pupils.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0 types	20.0	22.0
1 type	15.0	16.5
2 types	15.0	16.5
3 types	16.0	17.6
4 or more types	23.0	25.3

Pupils' work is on display.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0 types	5.0	5.5
1 type	10.0	11.0
2 types	15.0	16.5
3 types	13.0	14.3
4 or more types	45.0	49.5

Audiovisual materials are available in the classroom for use
by both teacher and pupils.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0 types	8.0	8.8
1 type	5.0	5.5
2 types	11.0	12.1
3 types	16.0	17.6
4 or more types	49.0	53.8

DIFFERENTIATING ASSIGNMENTS

Pupils have individual assignments.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0-20% of class	35.0	38.5
21-40% of class	6.0	6.6
41-60% of class	7.0	7.7
61-80% of class	10.0	11.0
81-100% of class	32.0	35.2

Pupils use materials at different levels of difficulty.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
1-2 levels	7.0	7.7
3-4 levels	6.0	6.6
5-6 levels	6.0	6.6
7-8 levels	6.0	6.6
9 or more levels	70.0	76.9

Pupils receive individual assistance from teacher or aide.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0-10% of class	27.0	29.7
11-20% of class	7.0	7.7
21-30% of class	12.0	13.2
31-40% of class	10.0	11.1
more than 40% of class	34.0	37.4

Pupils do enrichment (broadening, horizontal) work.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0-10% of class	9.0	9.9
11-15% of class	6.0	6.6
16-20% of class	6.0	6.6
21-25% of class	8.0	8.8
more than 25% of class	61.0	67.0

Pupil participation is active and purposeful as indicated by pupil involvement in work.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0-20% of class	2.0	2.2
21-40% of class	0.0	0.0
41-60% of class	5.0	5.5
61-80% of class	7.0	7.7
81-100% of class	76.0	83.5

USE OF INTRA-CLASS GROUPING*

The physical arrangement of the room allows for varying kinds of activity.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
1 type	2.0	2.2
2 types	12.0	15.2
3 types	20.0	22.0
4 types	19.0	20.9
5 or more types	34.0	37.4

Groupings change.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0 change	10.0	11.0
1 change	40.0	44.0
2 changes	39.0	42.9

Pupils help each other with work.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0-10% of class	0.0	0.0
11-20% of class	2.0	2.2
21-30% of class	3.0	3.3
31-40% of class	3.0	3.5
more than 40% of class	77.0	84.6

Teacher maintains check on progress of class by moving among groups.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0-20% of groups reached	5.0	5.5
21-40% of groups reached	2.0	2.2
41-60% of groups reached	3.0	3.3
61-80% of groups reached	4.0	4.4
more than 80% groups reached	74.0	81.3

*A group may consist of as few as 1 or as many as the whole class.

Pupils move freely about the room.

	<u>Number Observations</u>	<u>Per Cent Observed</u>
0-10% of class	18.0	19.8
11-15% of class	3.0	3.3
16-20% of class	6.0	6.6
21-25% of class	4.0	4.4
more than 25% of class	57.0	62.6

StudentsPercent Observed Behavior

Social Hostility	2.2	1.1	7.7	9.9	33.0	25.3	Positive Social Behavior
Negative Task-oriented Behavior	2.2	1.1	5.5	12.1	29.7	28.6	Positive Task-oriented Behavior
Uncooperative	1.1	0.0	4.4	12.1	29.7	30.8	Cooperative
Unresponsive	1.1	2.2	2.2	9.9	35.2	26.4	Responsive
Uninterested	1.1	1.1	4.4	9.9	31.9	28.6	Interested
Discontented	3.3	3.3	11.0	7.7	26.4	24.2	Contented

ClassroomPercent Observed Behavior

Restricted	9.9	5.5	6.6	2.2	8.8	47.3	Open
Hostile	1.1	2.2	4.4	7.7	25.1	41.8	Friendly
Tense	2.2	7.7	4.4	3.8	14.3	42.9	Relaxed

<u>Teacher</u>	<u>Percent Behavior Observed</u>						
Aloof	7.7	2.2	6.6	5.5	9.9	48.4	Responsive
Non Understanding	2.2	3.3	5.5	6.6	14.3	47.3	Understanding
Harsh	7.7	19.8	8.8	5.5	11.0	28.6	Kindly
Erratic	1.1	5.5	5.5	4.4	18.7	46.2	Steady
Evading	4.4	5.5	2.2	1.1	17.6	49.5	Responsible
Disorganized	2.2	1.1	4.4	2.2	16.5	49.5	Systematic
Dull	4.4	17.6	14.3	5.5	5.5	34.1	Stimulating
Stereotyped	18.7	12.1	7.7	7.7	4.4	30.8	Original

TABLE 29

IBEX
CAREER EDUCATION
TEACHERS' PRACTICES

(Presented as Number of
Total Responses by Choice)

	Daily	2-3 Times Weekly	2-3 Times Monthly	2-3 Times Yearly	Never
1. Career Education Materials	13	39	38	8	1
2. Class Presentation of Career Opportunities	4	24	48	20	1
3. Newspaper Ads and Magazines related to Job Opportunities	6	24	54	13	3
4. Interrelation of Concepts and Careers	23	27	31	13	2
5. Career Activities Center in Your School	8	14	23	36	11
6. Displays Concerning Careers and Jobs	41	9	26	22	3
7. Career Education Films or Filmstrips	2	6	29	47	13
8. Use of Local Resource Persons in Career Ed.	2	8	24	42	18
9. Visits to Self-Employed Persons	0	2	13	26	55
10. Visits to Factories or Plants	1	1	8	33	54
11. Career-related Role Playing and Simulations	1	9	31	33	25
12. Visits to Professional Persons	0	6	18	33	39
13. Group Discussion of Careers and Job Opportunities	4	12	53	26	4
14. Pupil Selection of Career Field of Interest	2	9	39	44	7
15. Integration of Basic Skills with Career Education	26	32	22	12	1
16. Use of Library Resources Related to Careers	6	23	32	29	9
17. Use of Audio/Visual Facilities in Career Education	8	8	39	29	14
18. Use of Professional Employment Agencies	1	2	5	21	68
19. Joint Planning using the Career Development Resource Center at Brown Jr. High	1	0	11	32	49

TABLE 30

IBEX
CAREER EDUCATION
TEACHERS' PRACTICES

(Presented as Percent of Total
Responses by Category)

	Daily	2-3 Times Weekly	2-3 Times Monthly	2-3 Times Yearly	Never
1. Career Education Materials	12.4	37.1	36.7	7.6	1.0
2. Class Presentation of Career Opportunities	3.8	22.9	45.7	19.0	1.0
3. Newspaper Ads and Magazines related to Job Opportunities	5.7	22.9	51.4	12.4	2.0
4. Interrelation of Concepts and Careers	21.9	25.7	29.5	12.4	1.0
5. Career Activities Center in Your School	7.6	13.3	21.9	34.3	10.5
6. Displays Concerning Careers and Jobs	39.0	8.6	24.8	21.0	2.9
7. Career Education Films or Filmstrips	1.9	5.7	27.6	44.8	12.4
8. Use of Local Resource Persons in Career Ed.	1.9	7.6	22.9	40.0	17.1
9. Visits to Self-Employed Persons	0.0	1.9	12.4	24.8	52.4
10. Visits to Factories or Plants	1.0	1.0	7.6	31.4	51.4
11. Career-related Role Playing and Simulations	1.0	8.6	29.5	31.4	23.8
12. Visits to Professional Persons	0.0	5.7	17.1	31.4	37.1
13. Group Discussion of Careers and Job Opportunities	3.8	11.4	50.5	24.8	3.8
14. Pupil Selection of Career Field of Interest	1.9	8.6	37.1	41.9	6.7
15. Integration of Basic Skills with Career Education	24.8	30.5	21.0	11.4	1.0
16. Use of Library Resources Related to Careers	5.7	21.9	30.5	27.6	8.6
17. Use of Audio/Visual Facilities in Career Education	7.6	7.6	37.1	27.6	13.3
18. Use of Professional Employment Agencies	1.0	1.9	4.8	21.0	64.8
19. Joint Planning using the Career Development Resource Center at Brown Jr. High	1.0	0.0	10.5	30.5	46.7

Career Development Exemplary Project
FY 1975

Expenditures - by Grade Level

Federal

		Other	K-3	4-6	7-9	10-12			
IJ 01 04	Personnel Comp. Overtime		16,038.75	16,038.75	16,038.75	16,038.75			
IK 01 31	Personnel Comp. TSA		4,238.50 15,220.00	4,238.50 15,220.00	4,238.50 15,220.00	4,238.50 15,220.00	16,954.00 60,880.00	16,954.00 60,880.00	
12 11	Insurance		196.00	196.00	196.00	196.00	465.00	465.00	
12	Health Benefits		416.25	416.25	416.25	416.25	540.00	540.00	
13	Retirement		1,418.25	1,418.25	1,418.25	1,418.00	1,186.00	1,186.00	
14	D.C. Cont.-Ret.		1,065.00	1,065.00	1,065.00	1,065.00	4,260.00	4,260.00	
21 14 19	Travel Field Trips	4036.86							
			1,500.00	3,000.00	3,500.00	2,000.00			
23 14 29	Rental-Off. Mach. Communications	4036.86	200.00 200.00	200.00 200.00	200.00 200.00	200.00 200.00			
24 51									
25 31 47	Fees, Prof. Serv. Fees, Entrance		400.00	400.00	800.00 200.00	500.00 300.00	1,176.00 2,000.00	1,000.00 500.00	
48	Training	500.00	4,601.75	4,601.75	4,601.75	4,601.75	10,500.00	10,500.00	
54	Fees, Misc.		4,575.00	4,575.00	4,575.00	4,575.00	10,853.00	10,500.00	
60	Repairs		50.00	50.00	50.00	50.00			
26 02 22	Direct Purchase Periodicals		100.00	174.88	249.76	174.88			
23	Ed. Supplies		4,000.00						
59	Provisions				200.00	200.00			
88	Office Supplies		700.00	700.00	800.00	800.00			
32 57 69	Textbooks Equipment		1,000.00 2,000.00	2,000.00 2,000.00	1,000.00	2,000.00			
41.50	Stipends		10,000.00	11,000.00	14,000.00	4,000.00			
							108,814.00	105,785.00	

		State		Title I		Grand Totals		
						Budget	Expenses	Balance
LJ 01	Personnel Comp.			64,155.00	64,155.00	64,155.00	64,155.00	
04	Overtime			200.00		200.00		200.00
IK 01	Personnel Comp.					16,954.00	16,954.00	
31	TSA					60,880.00	60,880.00	
12 11	Insurance			319.00	319.00	784.00	784.00	
12	Health Benefits			1,125.00	1,125.00	1,665.00	1,665.00	
13	Retirement			4,487.00	4,487.00	5,673.00	5,673.00	
14	D.C. Cont.-Ret.					4,260.00	4,260.00	
21 14	Travel	4,000.00	3,067.13	1,500.00	969.73	5,500.00	4,036.86	1,463.14
19	Field Trips	9,005.00	7,385.00	2,615.00	2,615.00	11,620.00	10,000.00	1,620.00
23 14	Rental-Off. Mach.	800.00	800.00			800.00	800.00	
29	Communications			800.00	800.00			
24 51		3,500.00		1,500.00	1,500.00	5,000.00		5,000.00
25 31	Fees, Prof. Serv.	1,583.00	1,000.00			2,759.00	2,000.00	759.00
47	Fees, Entrance					2,000.00	500.00	1,500.00
48	Training	6,000.00	6,000.00	6,100.00	6,100.00	22,600.00	22,600.00	
54	Fees, Misc.	1,500.00	1,500.00	3,415.00	3,300.00	15,768.00	15,300.00	468.00
60	Repairs			200.00	200.00	200.00	300.00	
26 32	Direct Purchase	300.00				300.00		300.00
22	Periodicals	2,000.00	499.52	200.00	200.00	2,200.00	699.52	1,500.48
23	Ed. Supplies	19,324.00	16,106.51	11,083.00	11,083.00	30,407.00	27,189.51	3,219.49
59	Provisions	500.00	400.00			500.00	400.00	100.00
88	Office Supplies	2,000.00	2,000.00	1,000.00	1,000.00	3,000.00	3,000.00	
32 57	Textbooks	3,000.00	3,000.00	3,000.00	3,000.00	6,000.00	6,000.00	
69	Equipment	5,000.00	4,000.00	4,500.00	4,500.00	9,500.00	8,500.00	1,000.00
41 50	Stipends	50,000.00	30,000.00	9,000.00	9,000.00	59,000.00	39,000.00	20,000.00
		108,512.00	74,995.43	115,199.00	112,833.73	332,525.00	295,596.89	36,928.11

CAREER EDUCATION PROGRAM
INSTRUMENT CATALOG

Washington, D.C.

Appendix B

Removed upon request of D.C. public schools

**IBEX
CAREER EDUCATION
TEACHERS' PRACTICES**

	Daily	2-3 Times Weekly	2-3 Times Monthly	2-3 Times Yearly	Never
1. Career Education Materials					
2. Class Presentation of Career Opportunities					
3. Newspaper Ads and Magazines related to Job Opportunities					
4. Interrelation of Concepts and Careers					
5. Career Activities Center in Your School					
6. Displays Concerning Careers and Jobs					
7. Career Education Films or Filmstrips					
8. Use of Local Resource Persons in Career Ed.					
9. Visits to Self-Employed Persons					
10. Visits to Factories or Plants					
11. Career-related Role Playing and Simulations					
12. Visits to Professional Persons					
13. Group Discussion of Careers and Job Opportunities					
14. Pupil Selection of Career Field of Interest					
15. Integration of Basic Skills with Career Education					
16. Use of Library Resources Related to Careers					
17. Use of Audio/Visual Facilities in Career Education					
18. Use of Professional Employment Agencies					
19. Joint Planning using the Career Development Resource Center at Brown Jr. High					